

FIG. 1 (α)

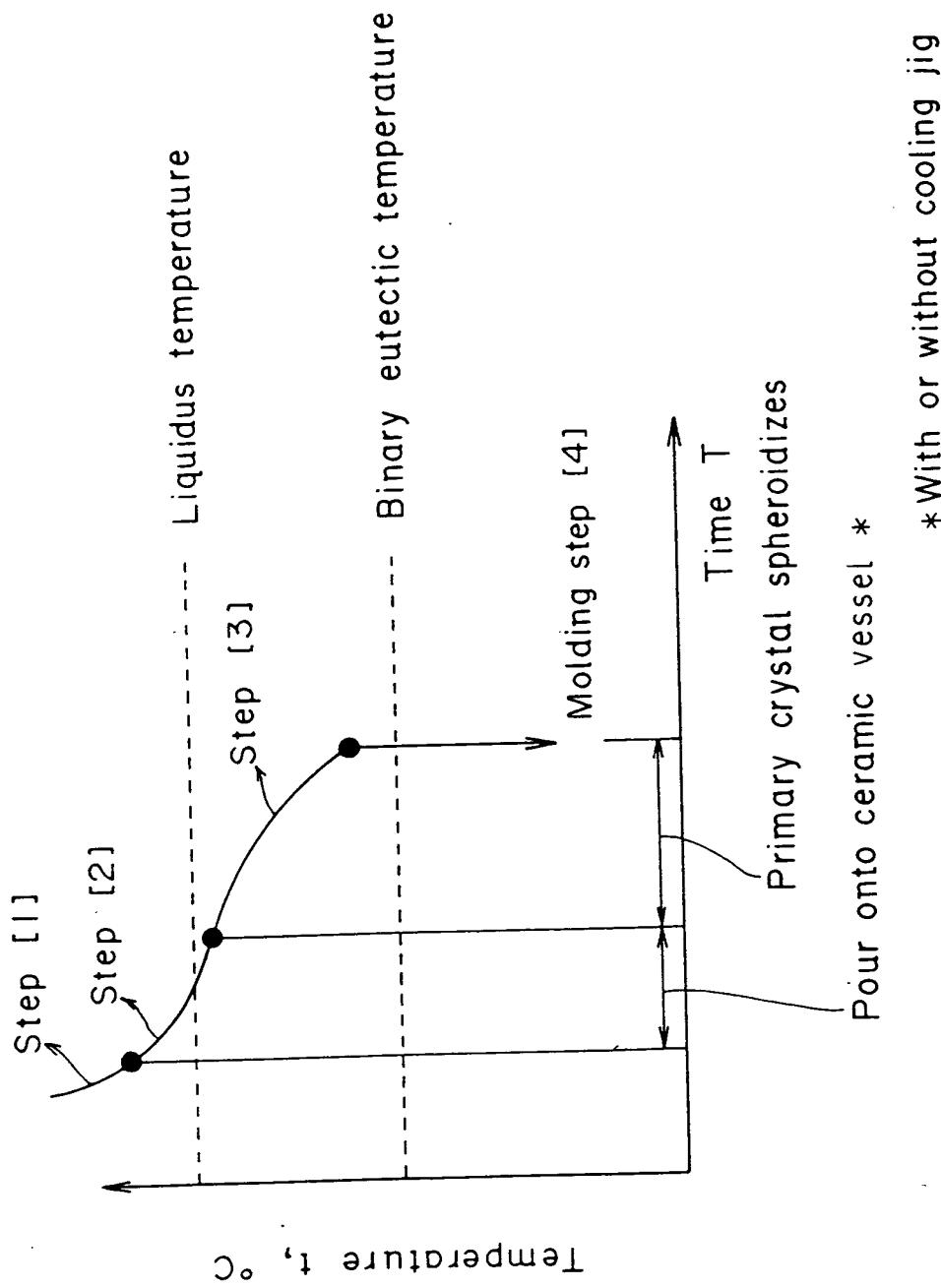


FIG. 1 (b)

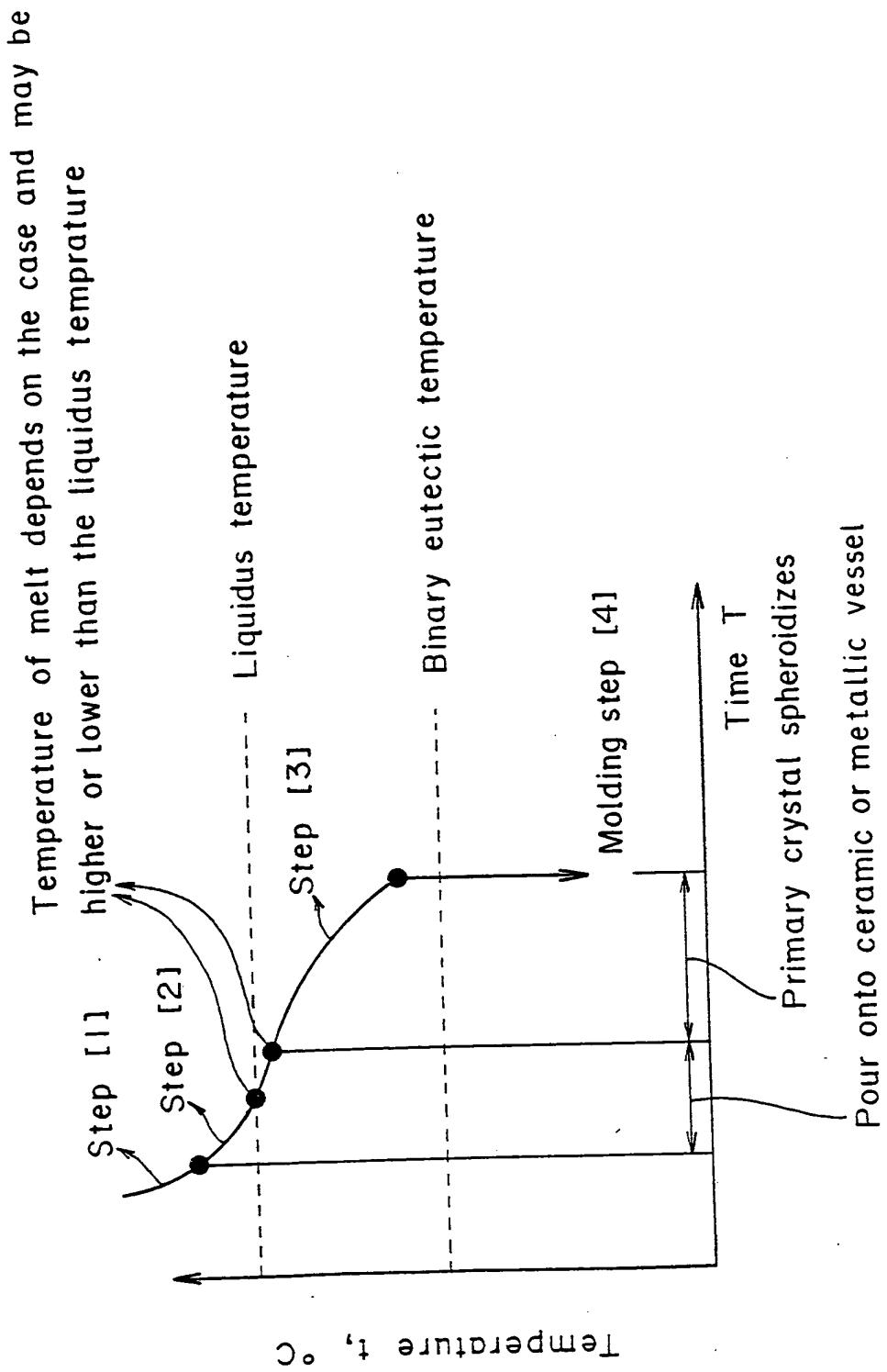


FIG. 2 (α)

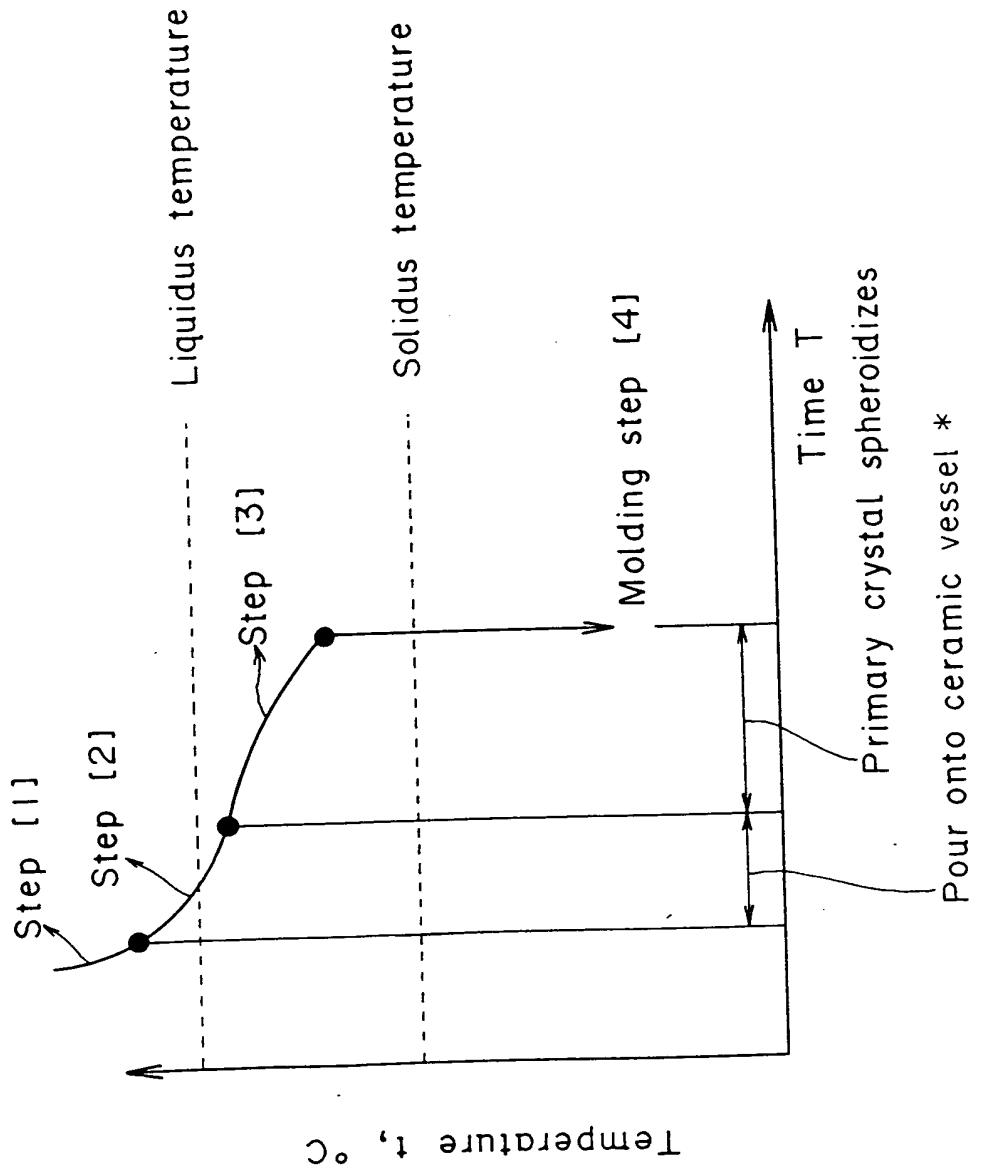


FIG. 2 (b)

Temperature of melt depends on the case and may be higher or lower than the liquidus temperature

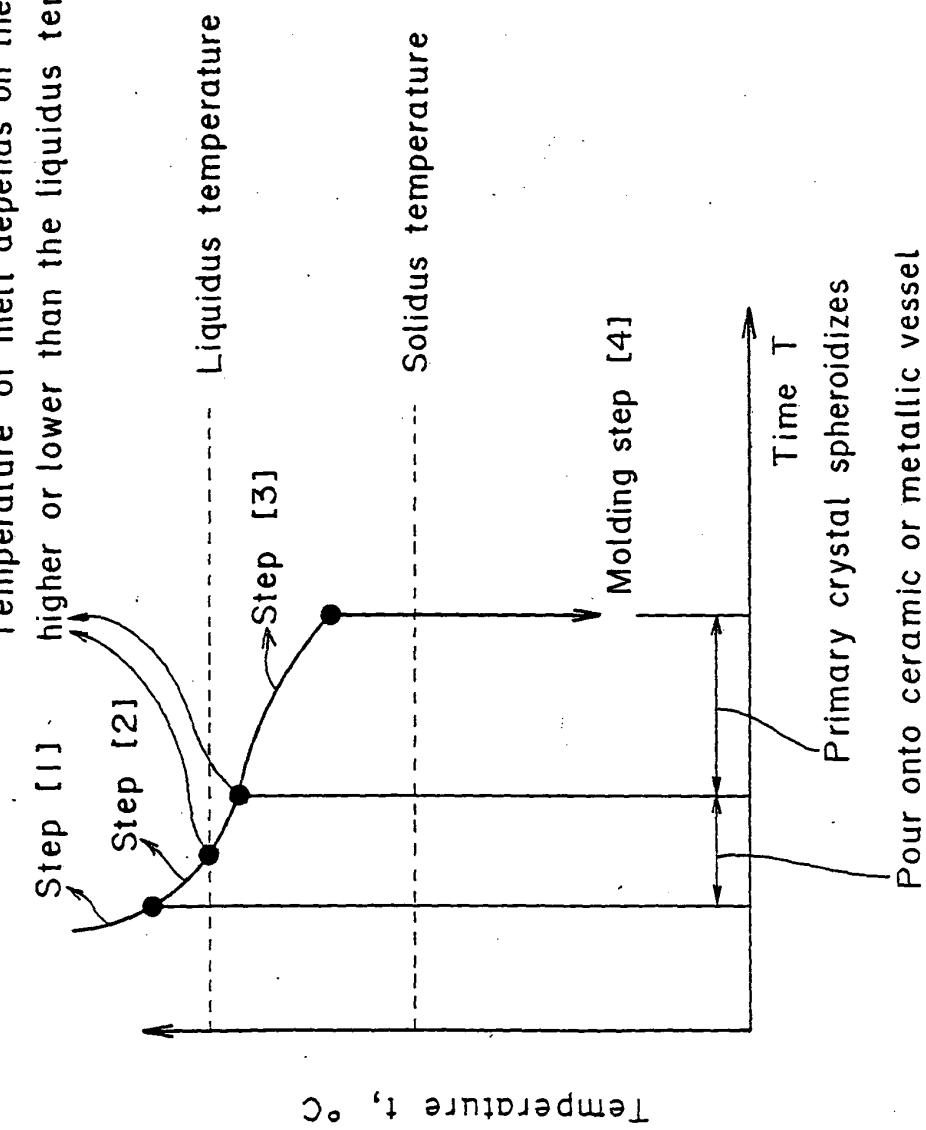


FIG. 3 (a)

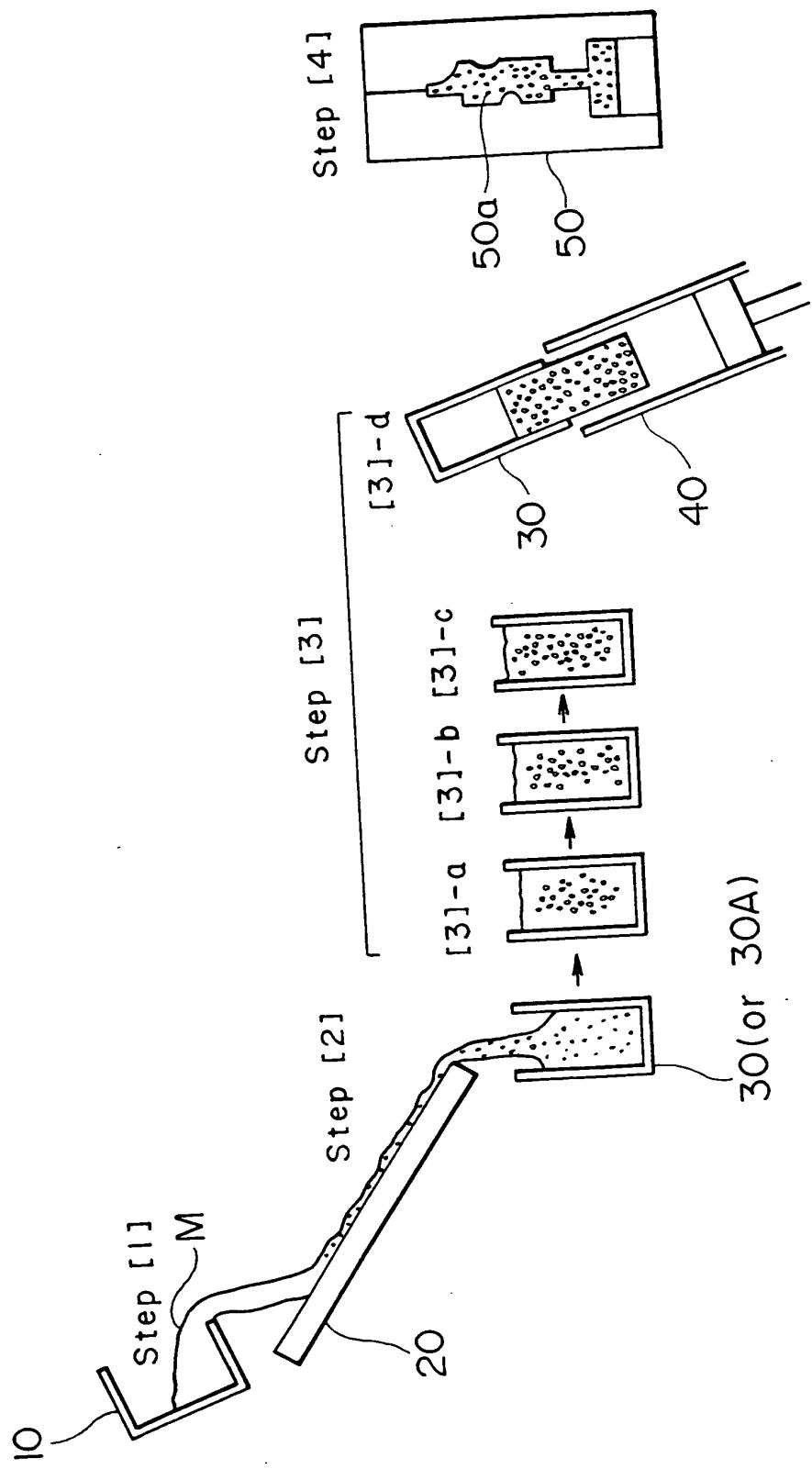
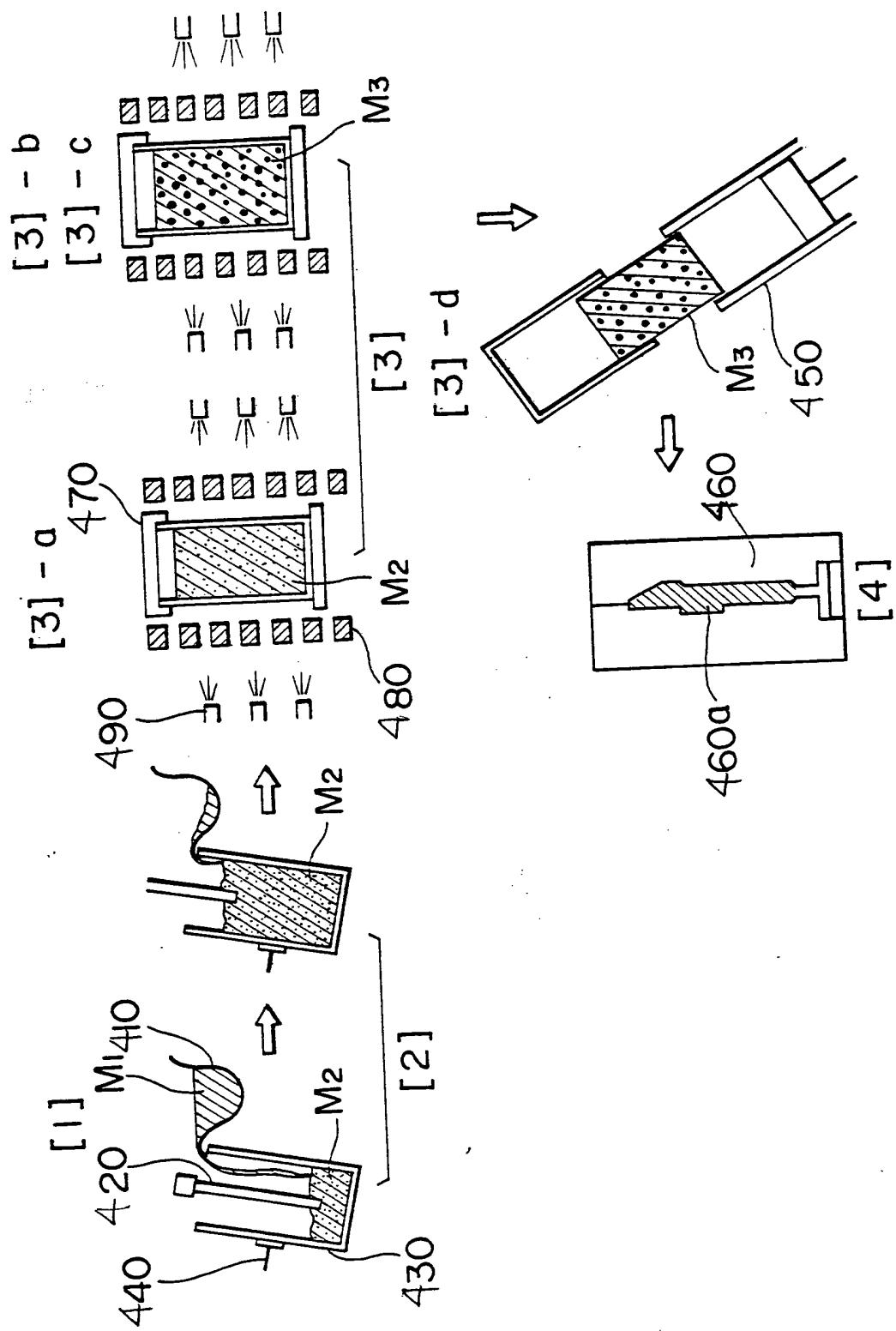


FIG. 3(b)



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FIG. 4

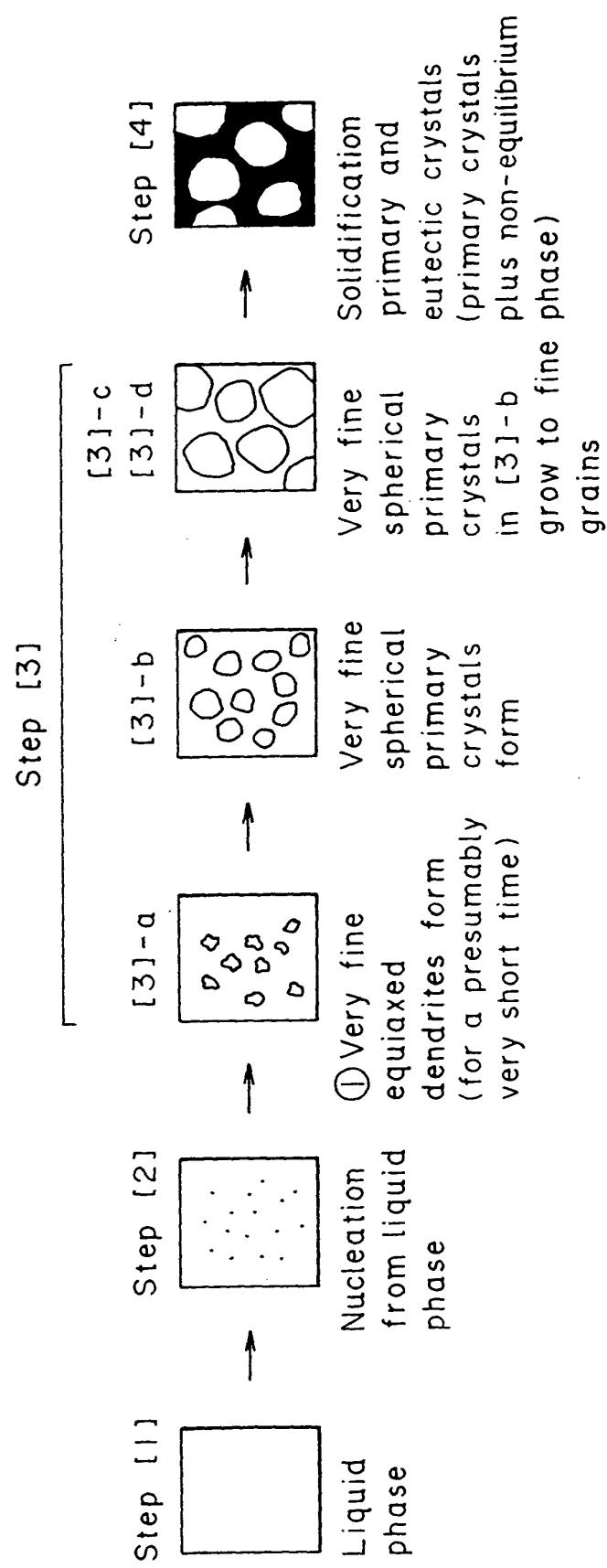


FIG. 5(a)

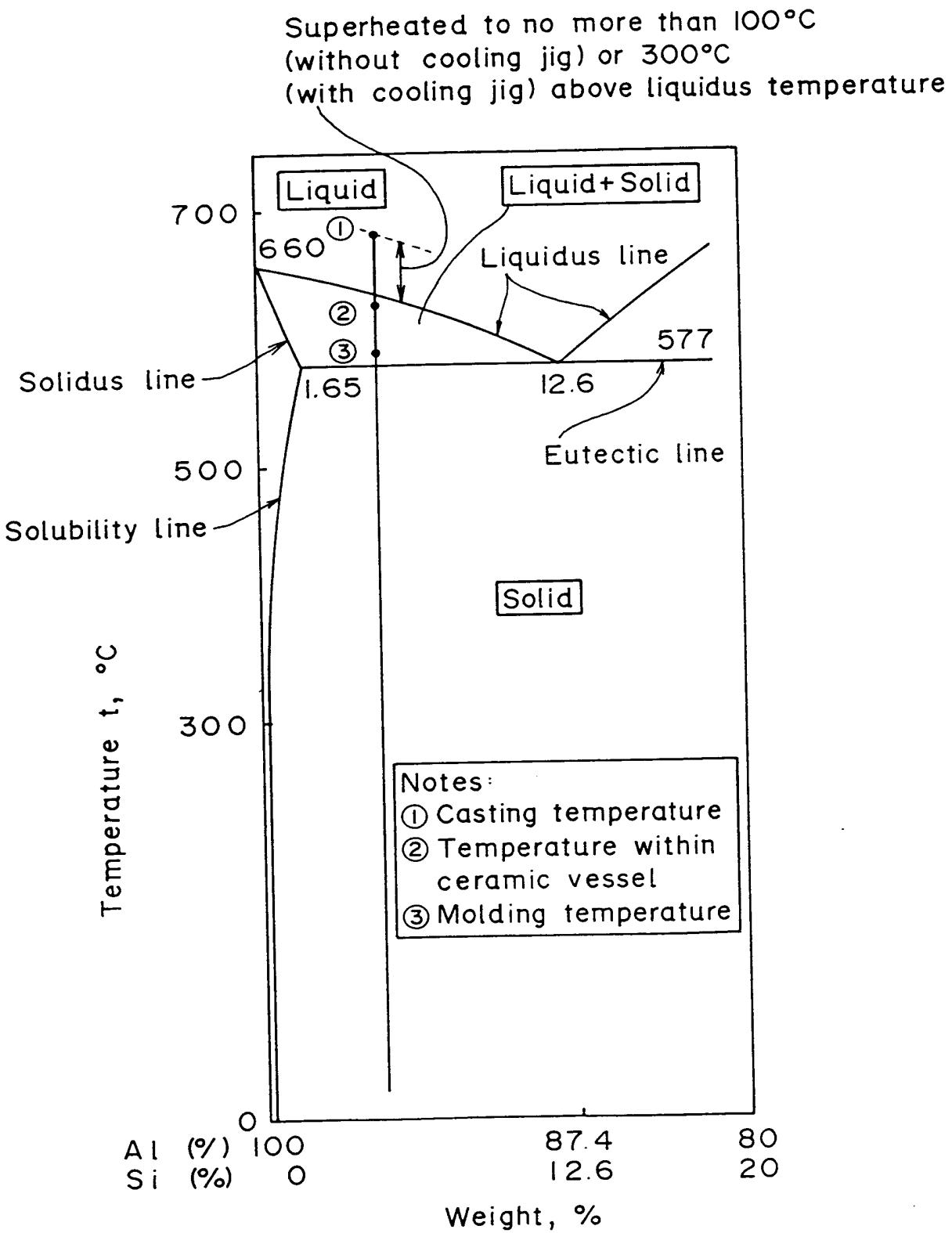


FIG. 5(b)

Temperature of melt depends on the case and may be higher or lower than the liquidus temperature

Superheated to no more than 50°C above liquidus temperature

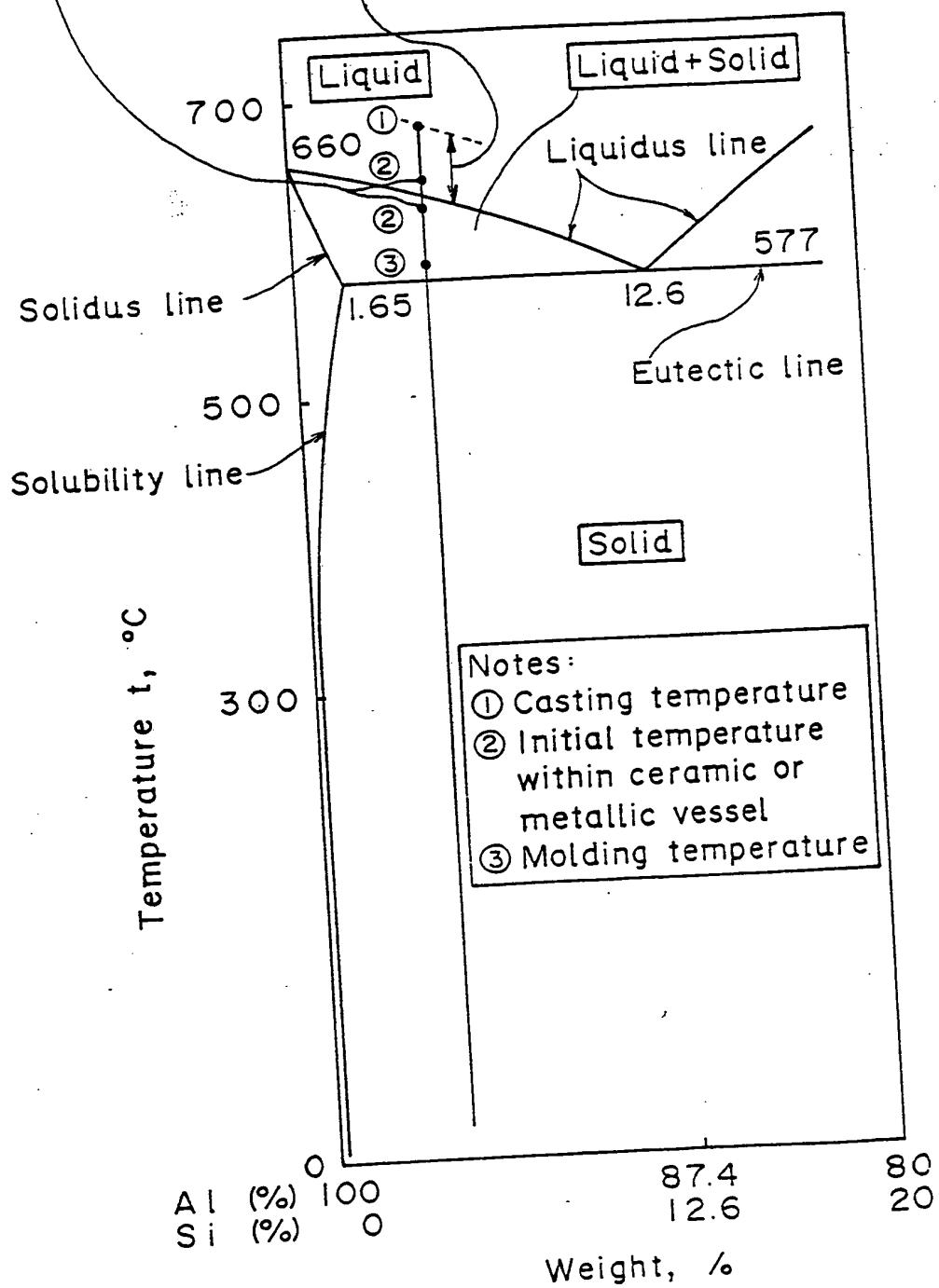


FIG. 6(a)

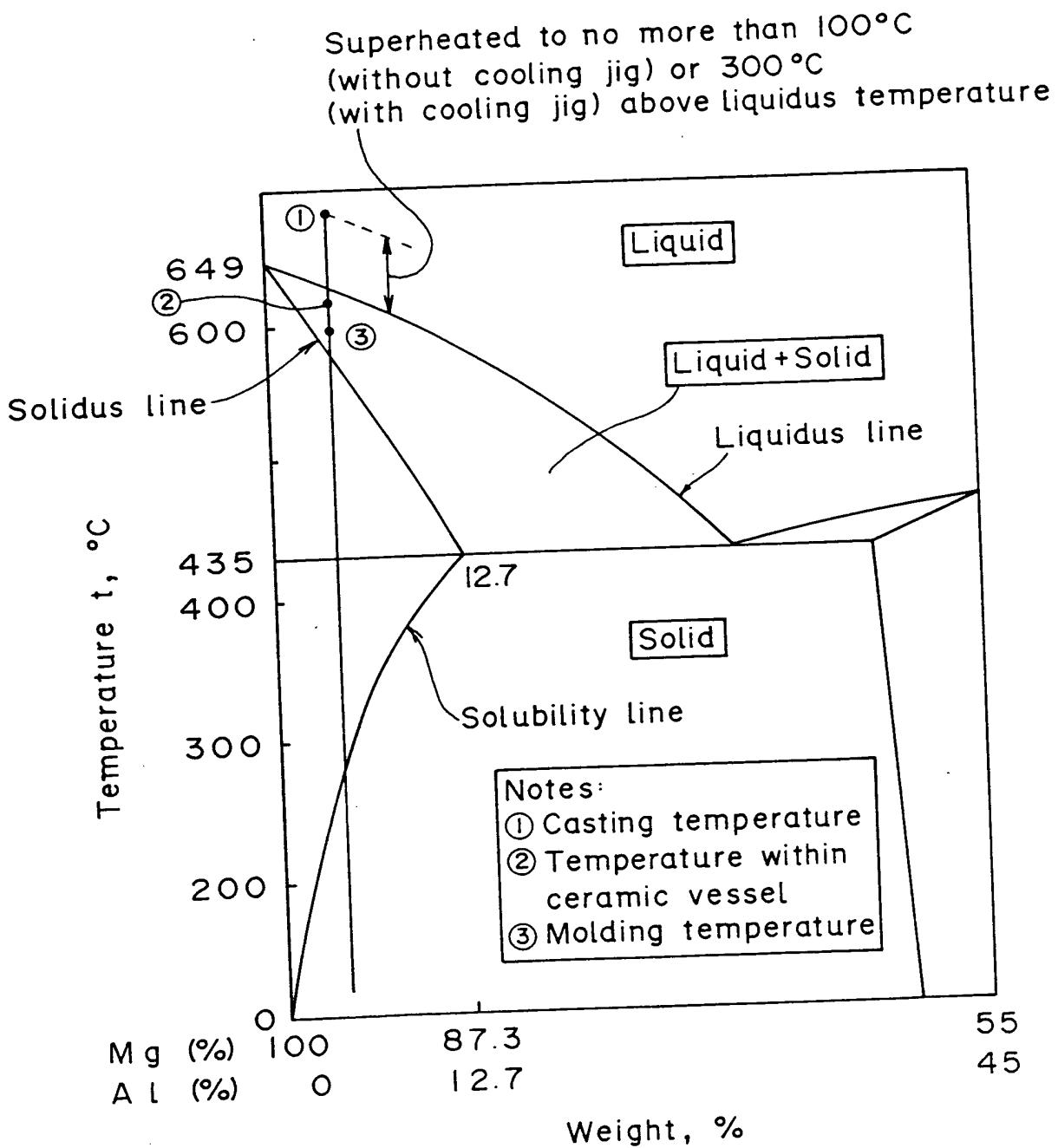


FIG. 6(b)

Temperature of melt depends on the case and may be higher or lower than the liquidus temperature

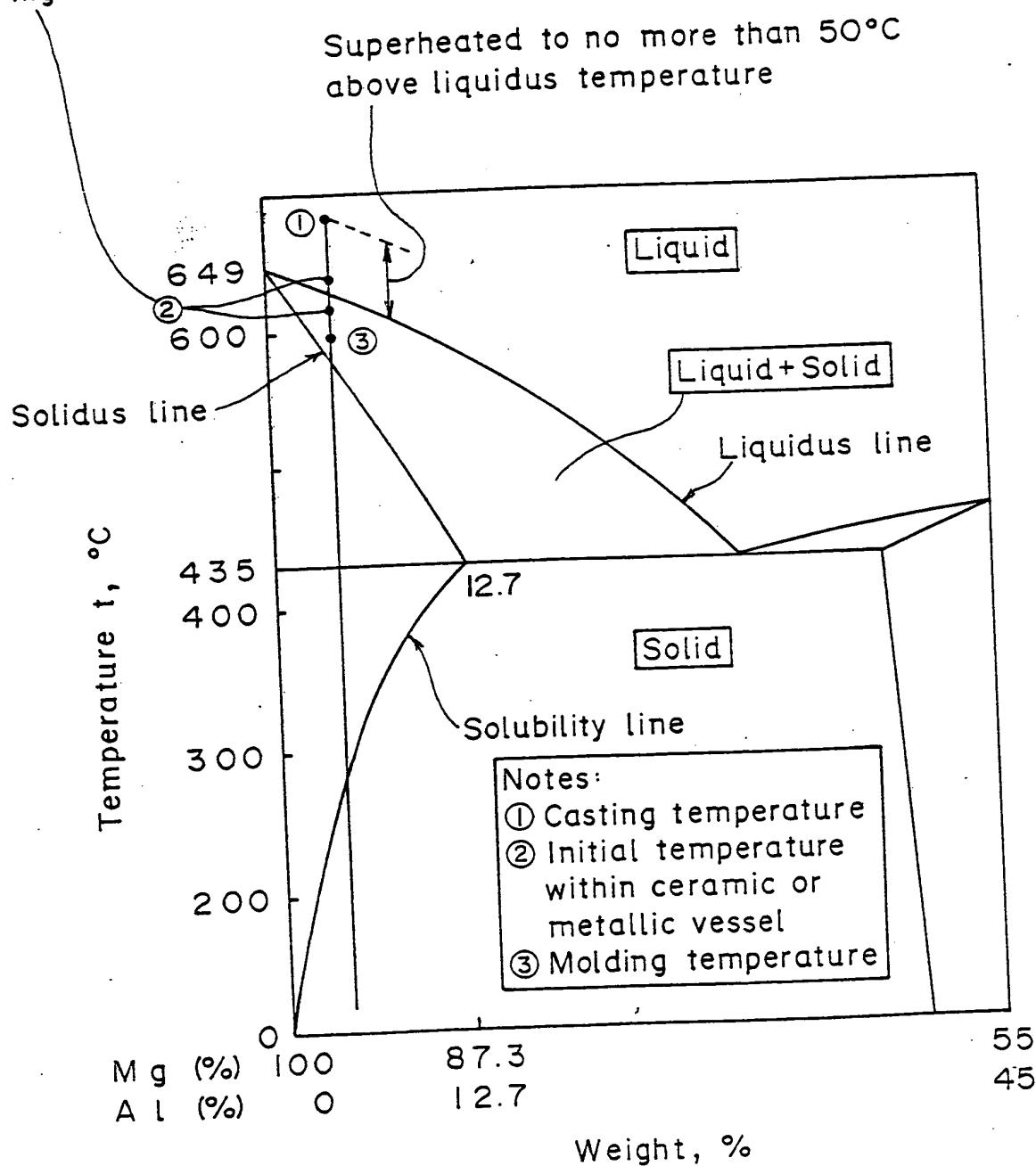


FIG. 7(a)

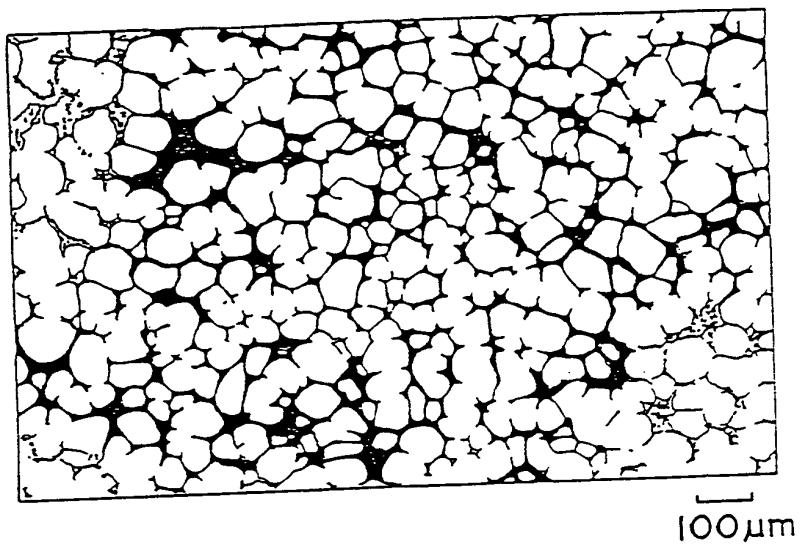
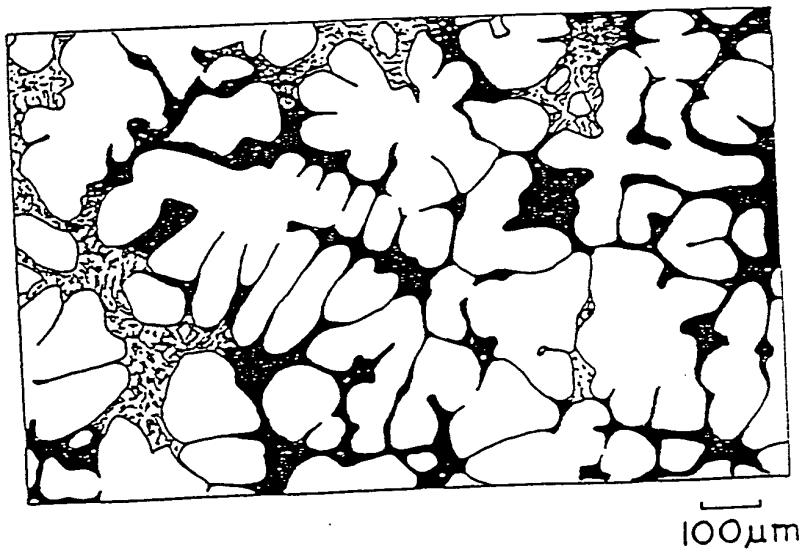


FIG. 8(a) Prior Art



200 μ m

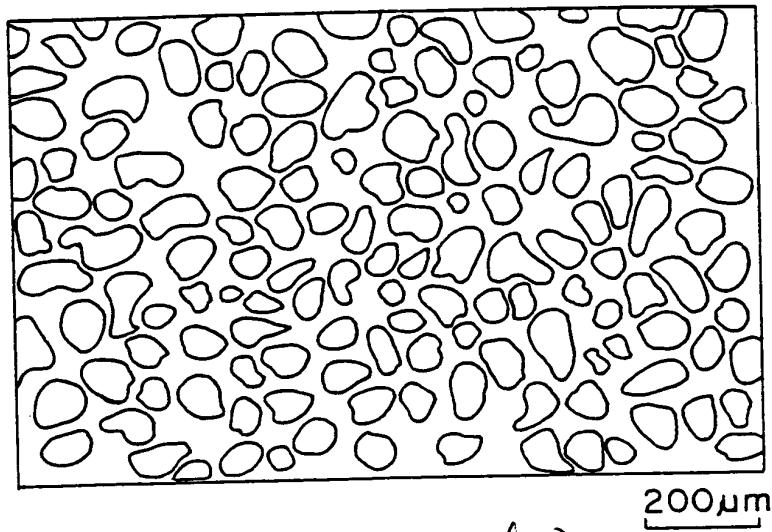


FIG. 7(b)

200 μ m



FIG. 8(b)
PRIOR ART

FIG. 75(b)

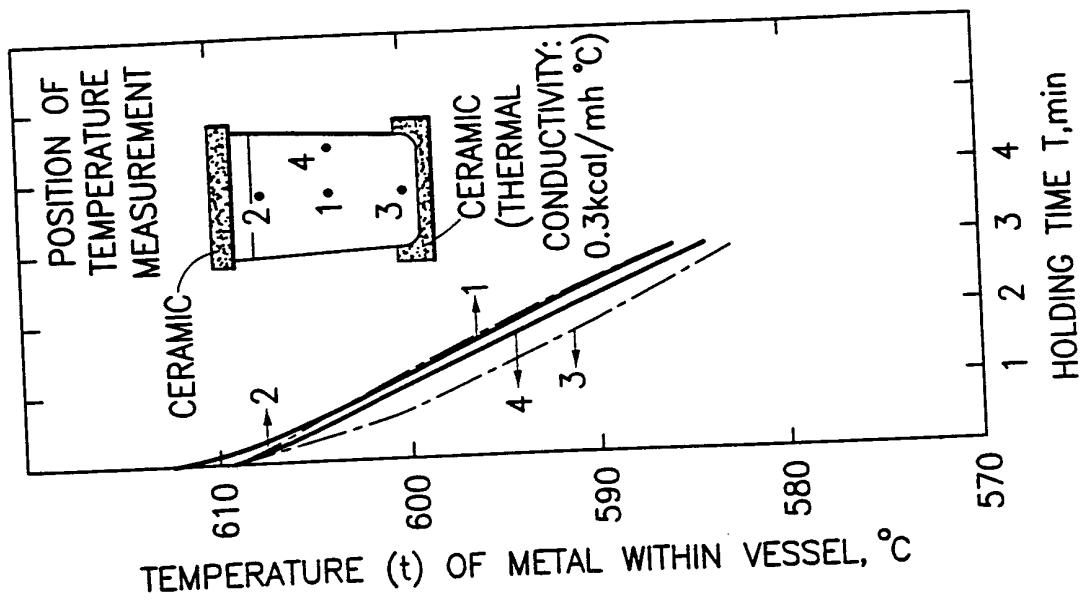
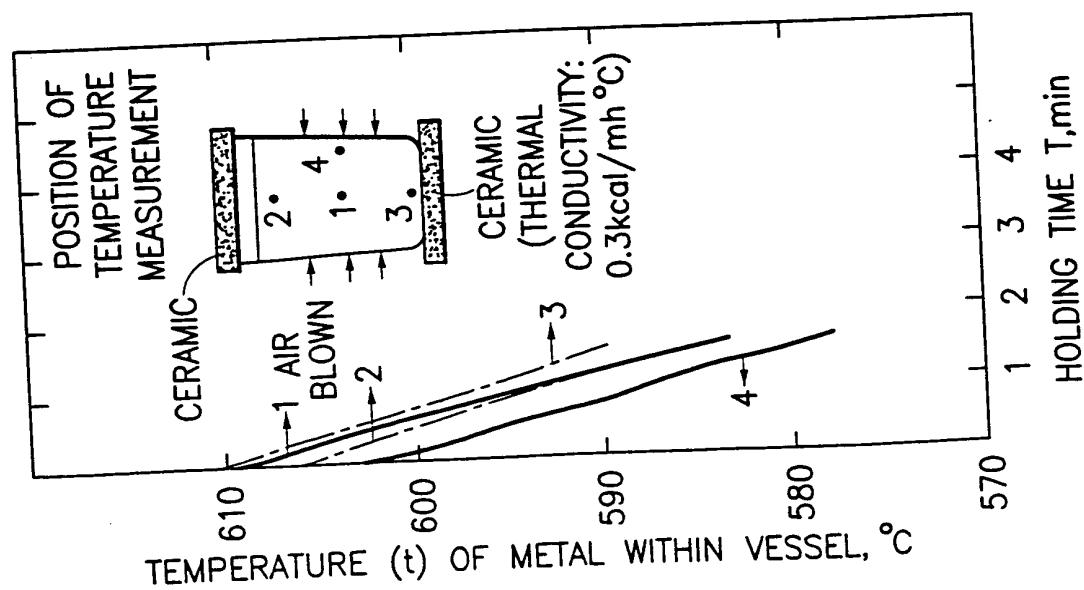


FIG. 75(a)



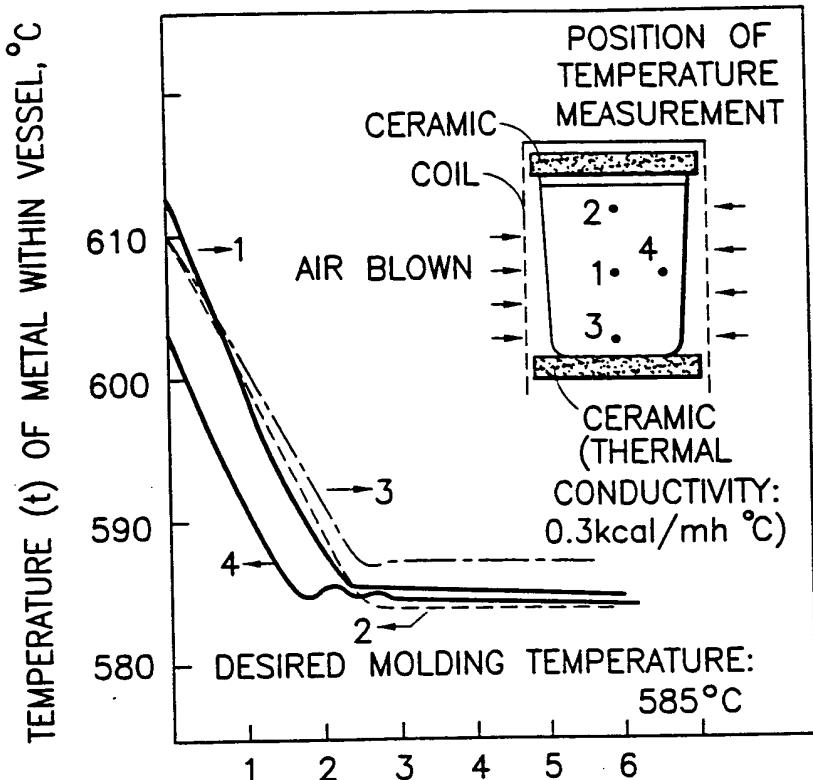


FIG. 76(a)

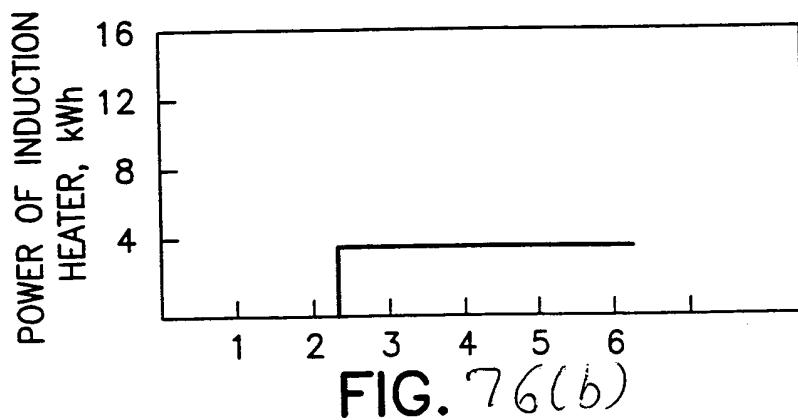


FIG. 76(b)

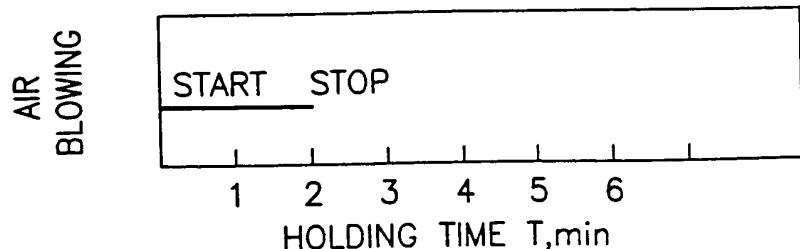
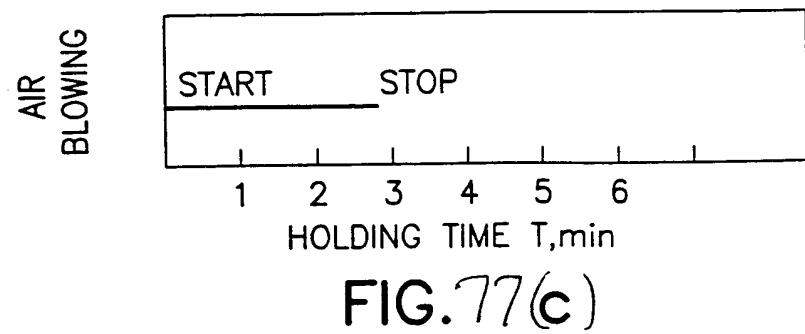
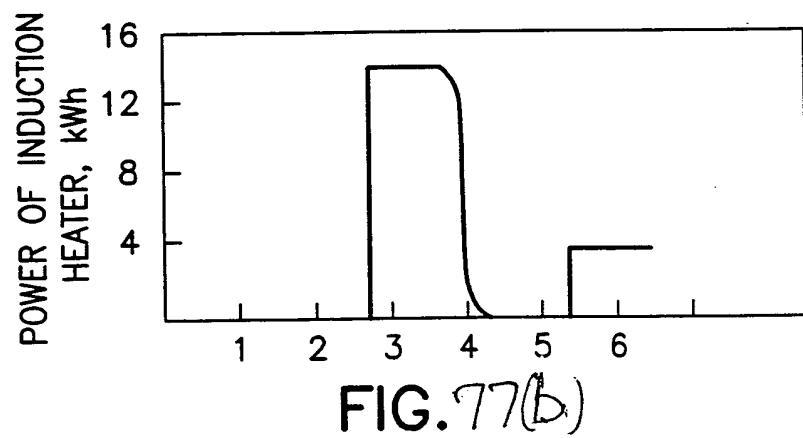
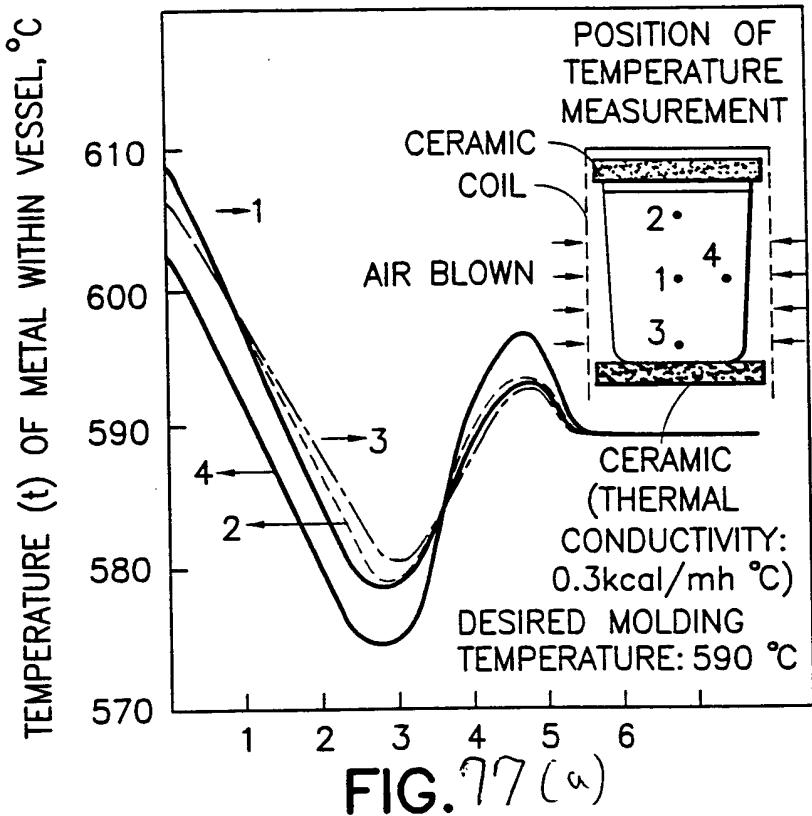
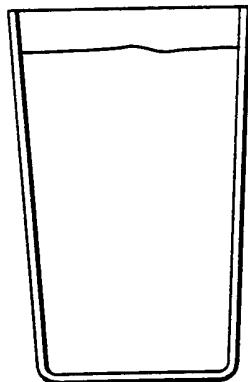


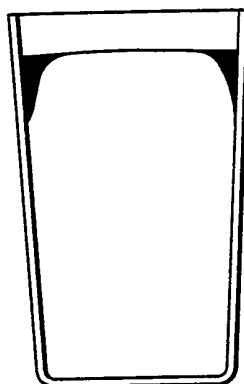
FIG. 76(c)





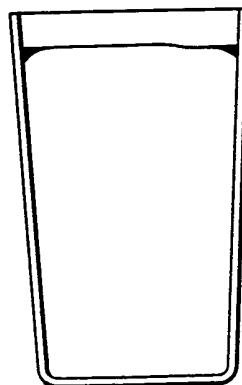
WHEN MOLDING TEMPERATURE IS REACHED

FIG. 78(a)



WHEN HEATED AND HELD WITH rf INDUCTION
HEATER (AT 8 kHz) FOR 20 min AFTER
MOLDING TEMPERATURE WAS REACHED

FIG. 78(b)



WHEN HEATED AND HELD WITH rf INDUCTION
HEATER (AT 40 kHz) FOR 20 min AFTER
MOLDING TEMPERATURE WAS REACHED

FIG. 78(c)

FIG. 79

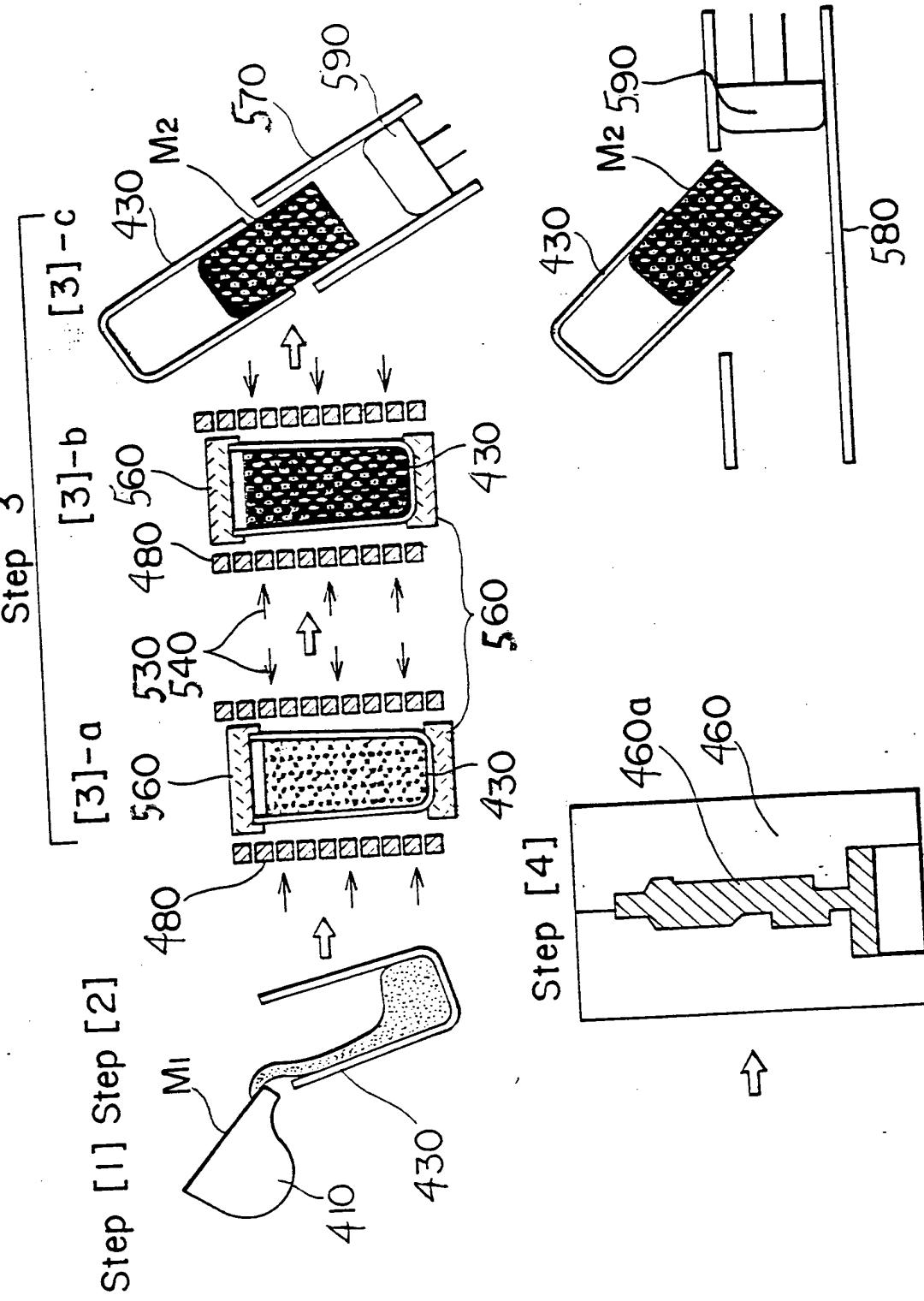


FIG. 80
AC4CH(Al-7Si-0.3Mg-0.15Ti)

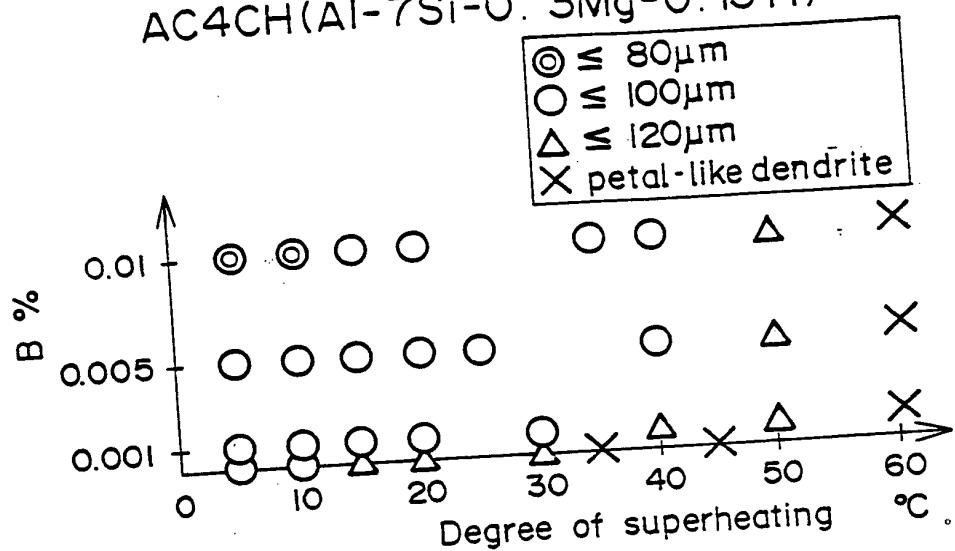


FIG. 81
7075(Al-5.5Zn-2.5Mg-1.6Cu-0.15Ti)

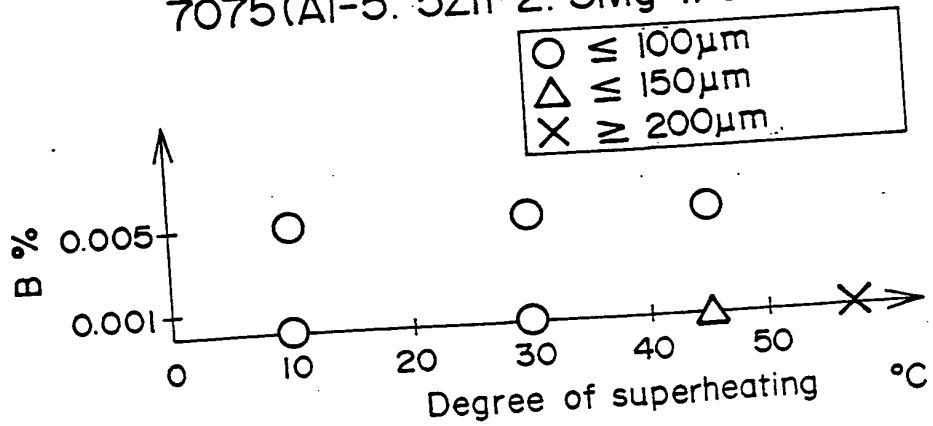


FIG. 82

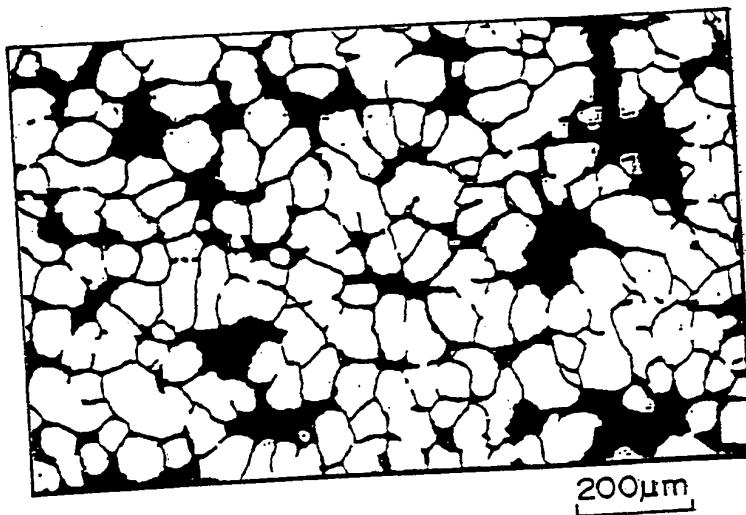


FIG. 82
200 μm

FIG. 83

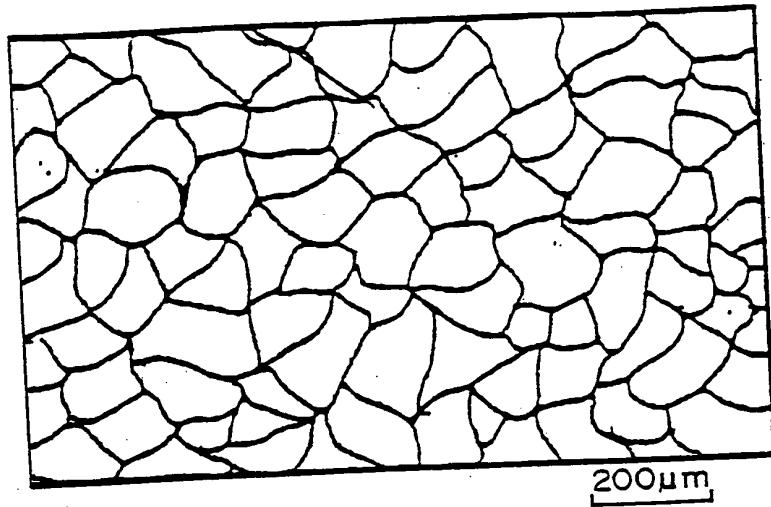


FIG. 84

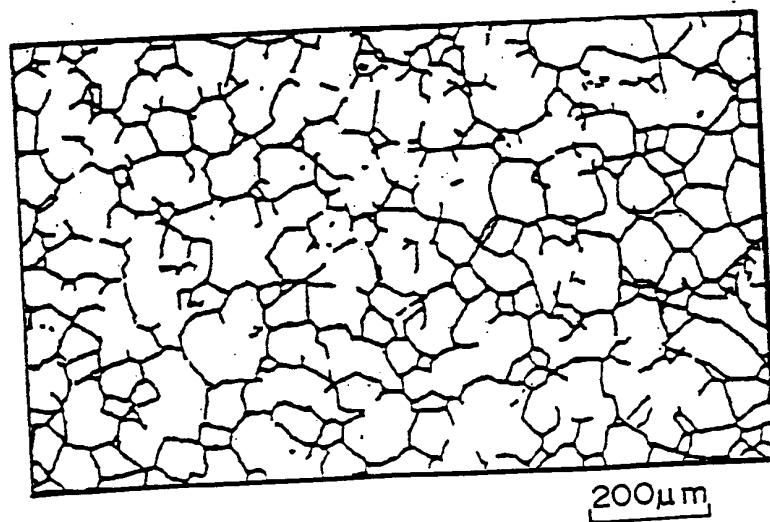


FIG. 85 Prior Art

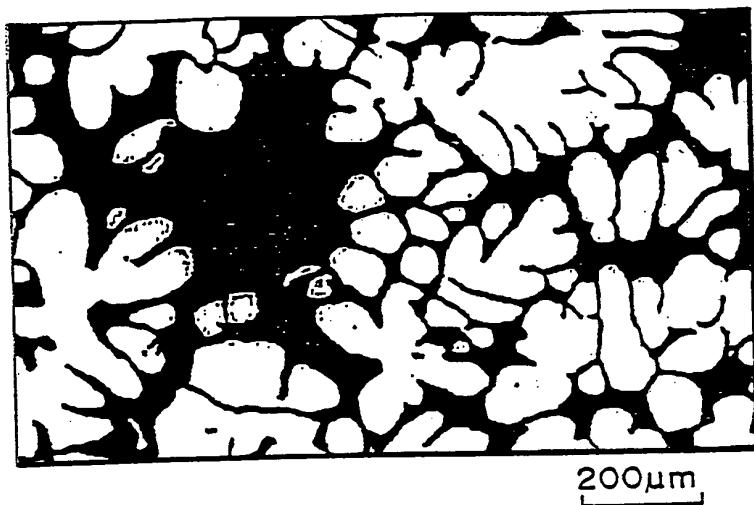


FIG. 86 Prior Art

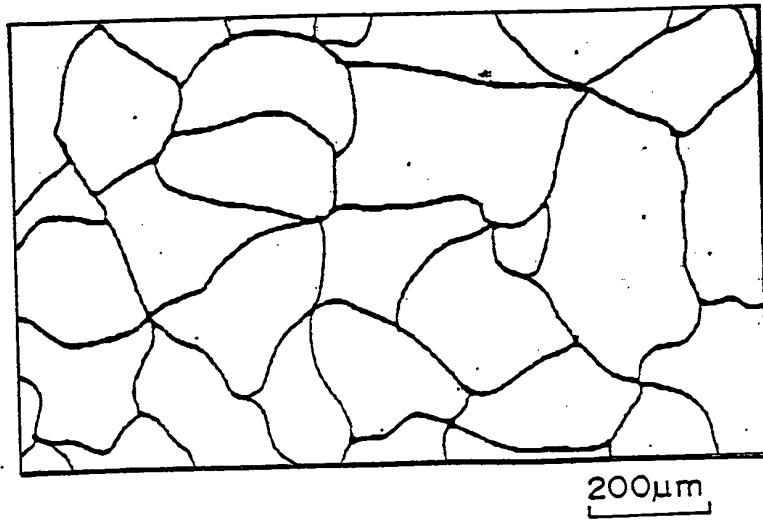


FIG. 87 Prior Art

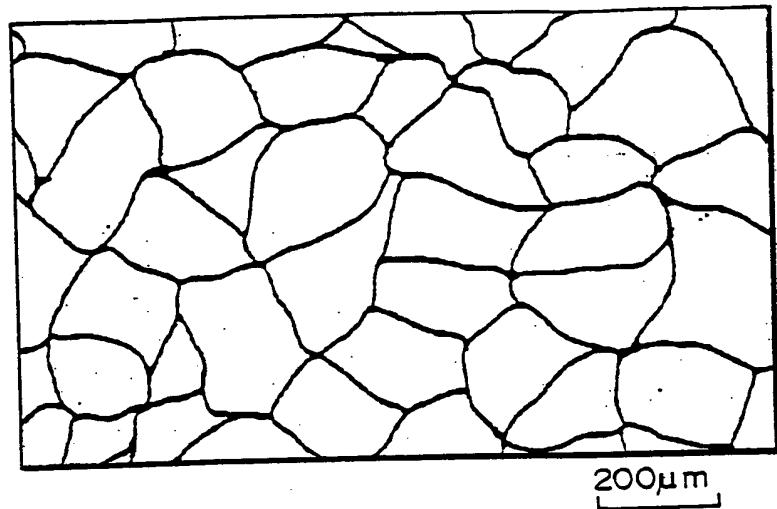
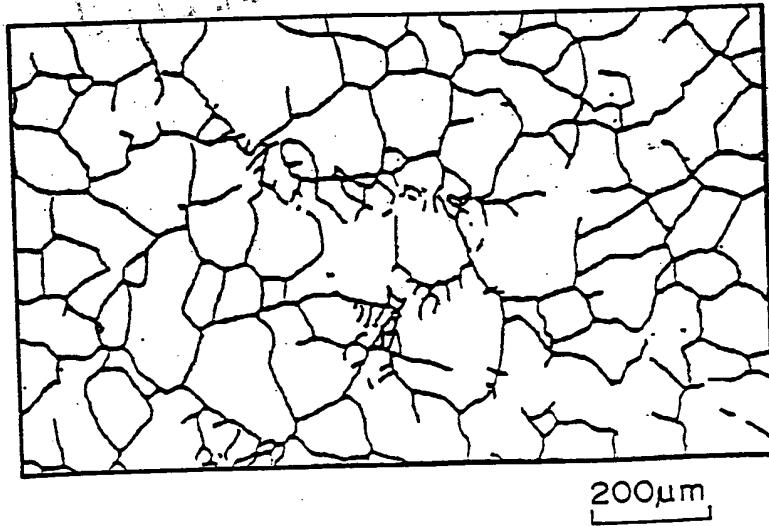


FIG. 88 Prior Art



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FIG. 9

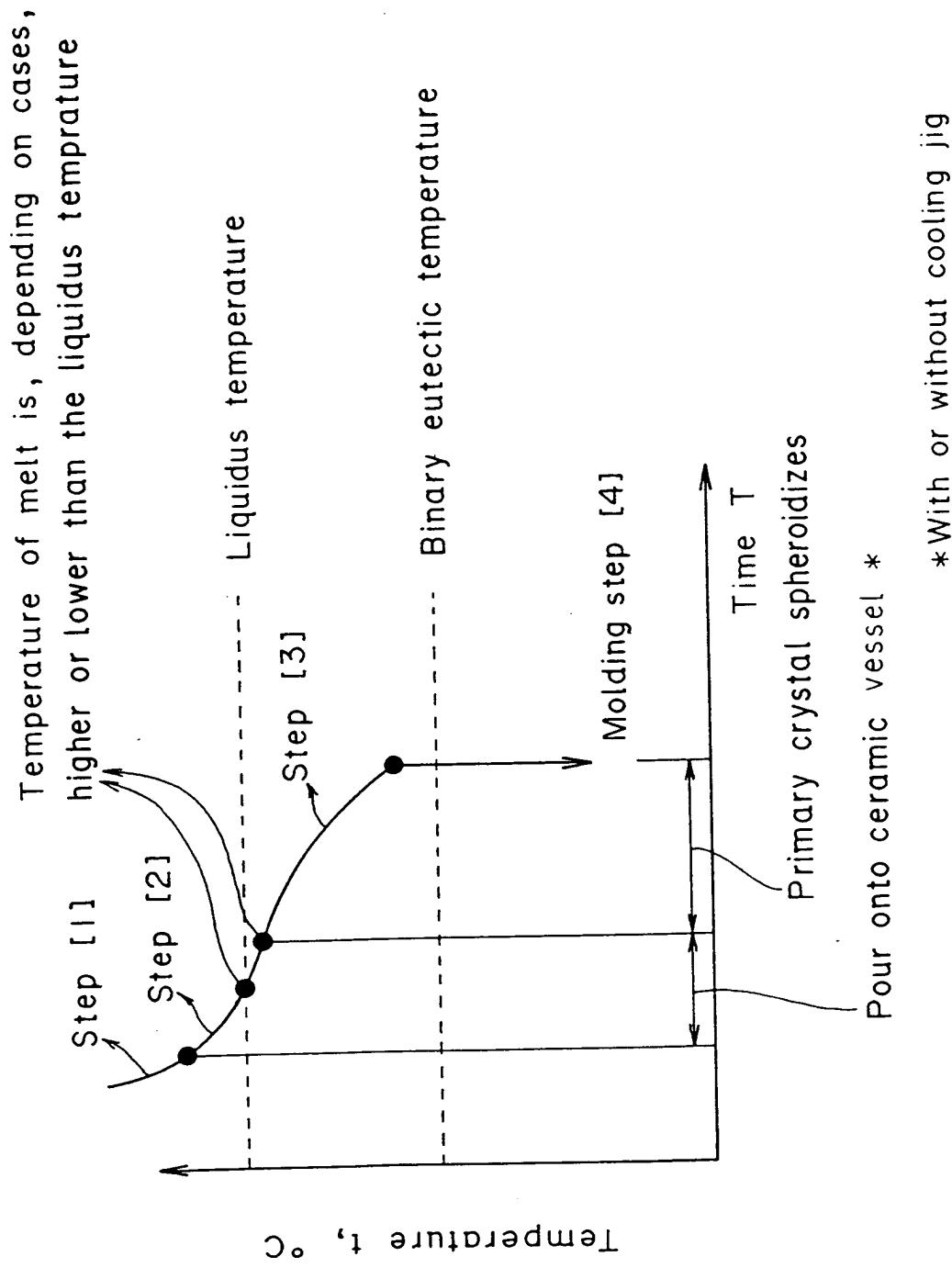
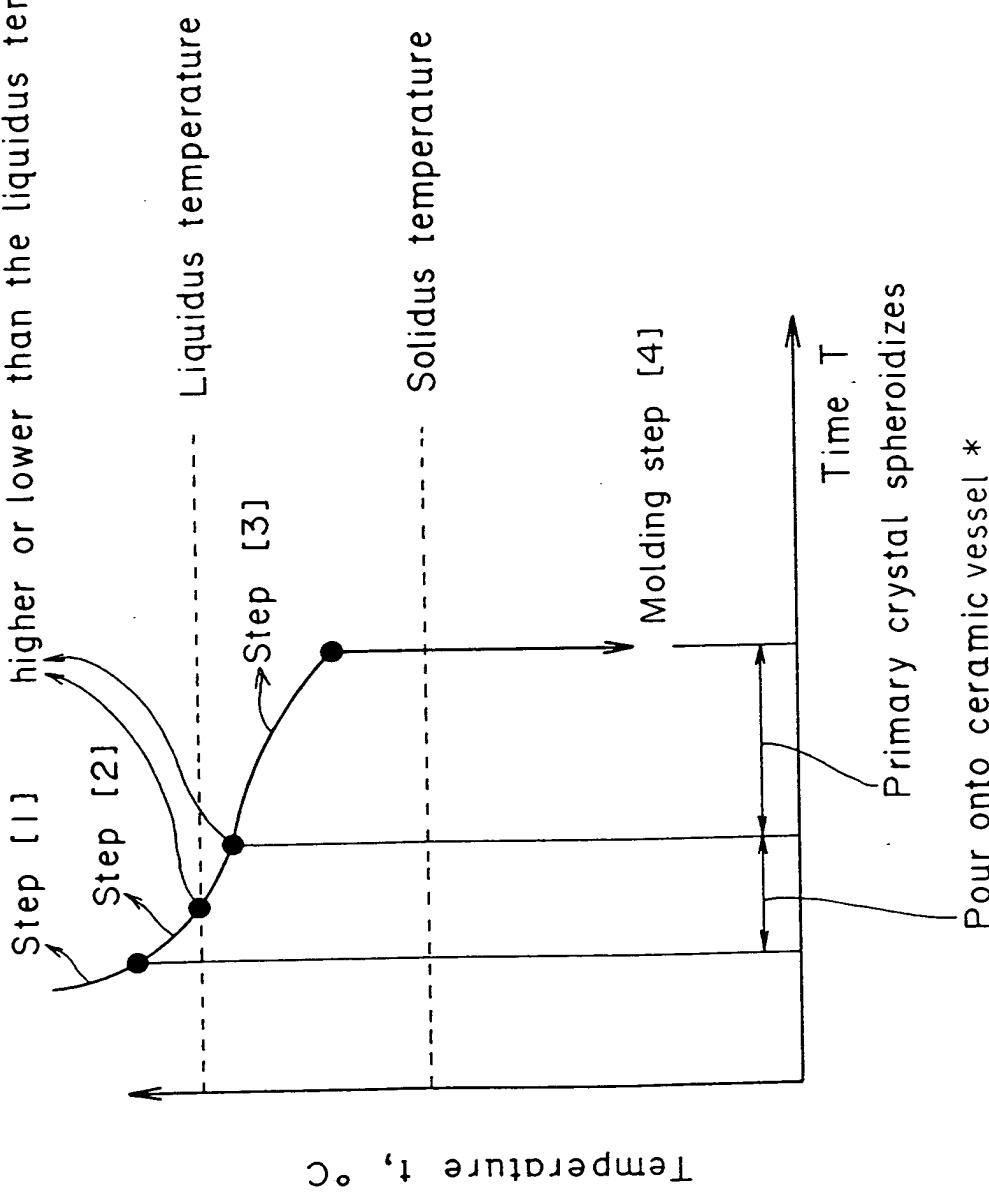


FIG. 10

Temperature of melt is, depending on cases,
higher or lower than the liquidus temperature



*With or without cooling jig

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FIG. II

Temperature of melt is, depending on cases,
higher or lower than the liquidus temperature

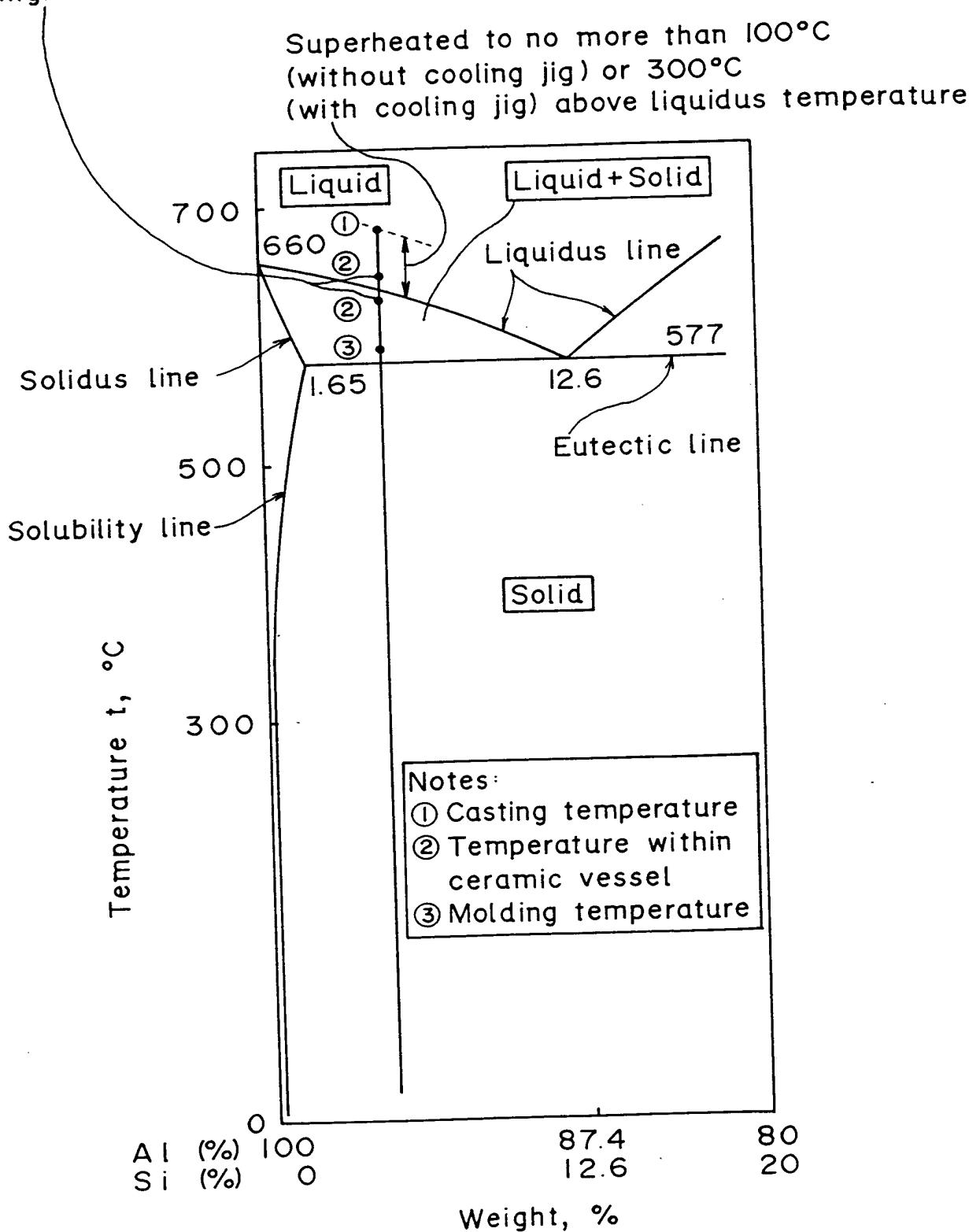
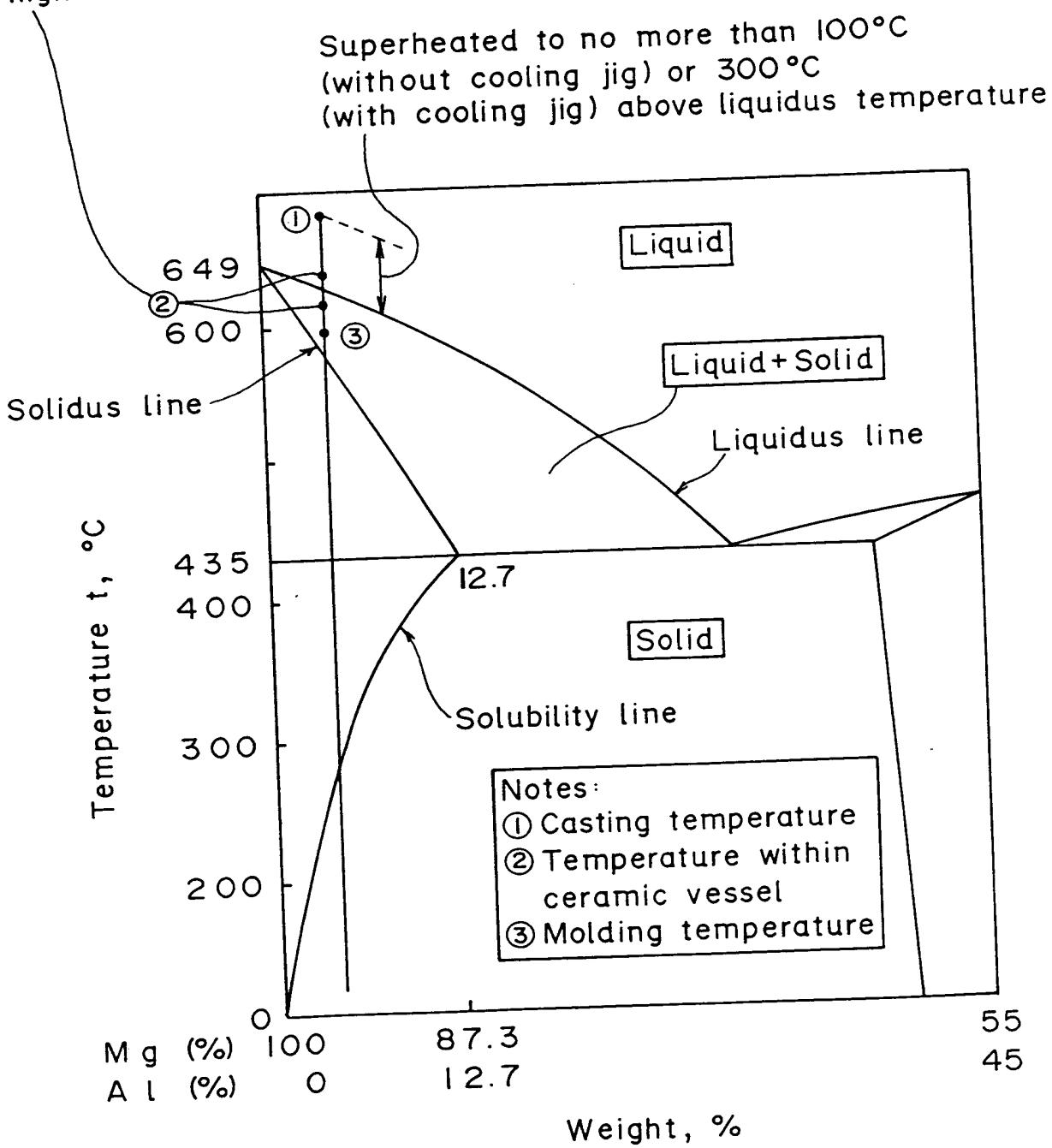


FIG. 12

Temperature of melt is, depending on cases,
higher or lower than the liquidus temperature



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FIG. 13

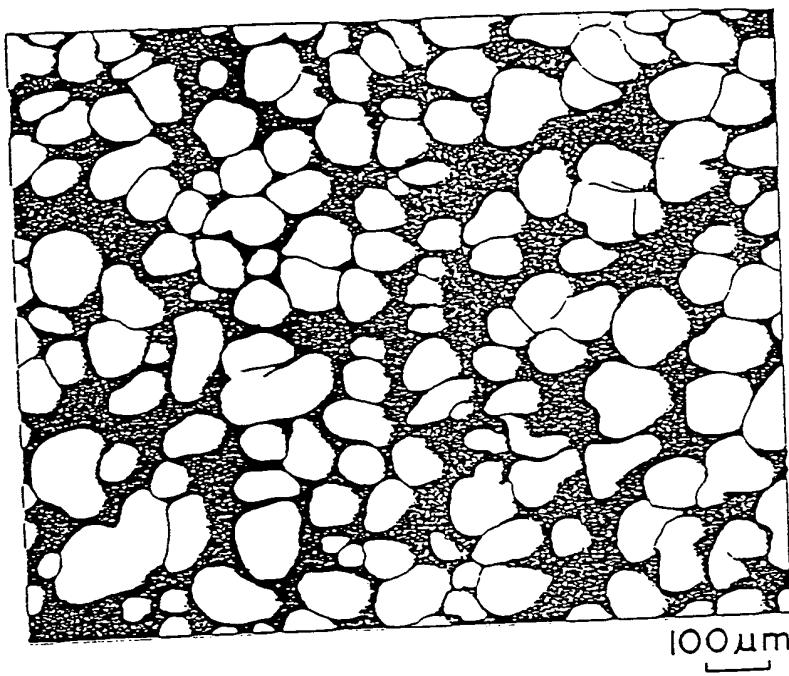


FIG. 14 Prior Art

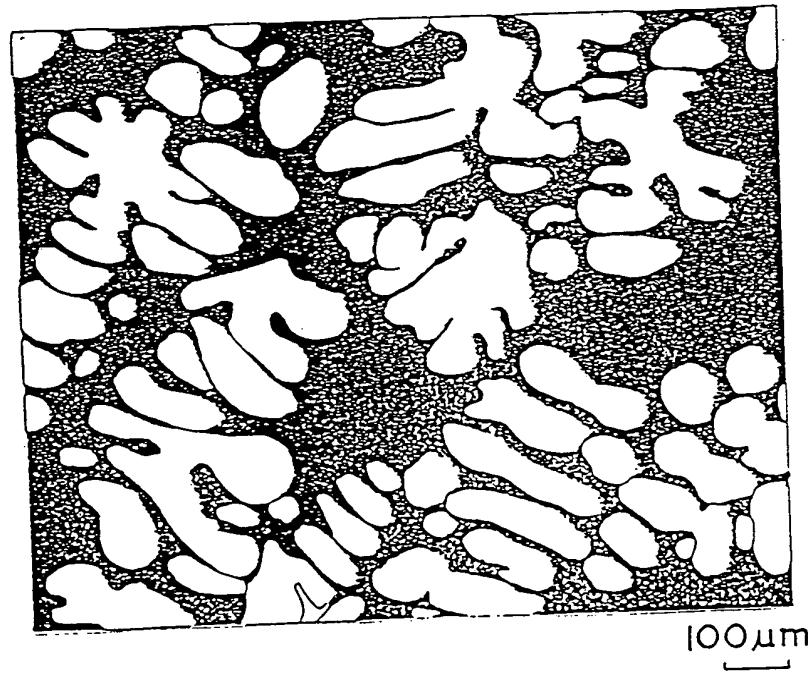


FIG. 15

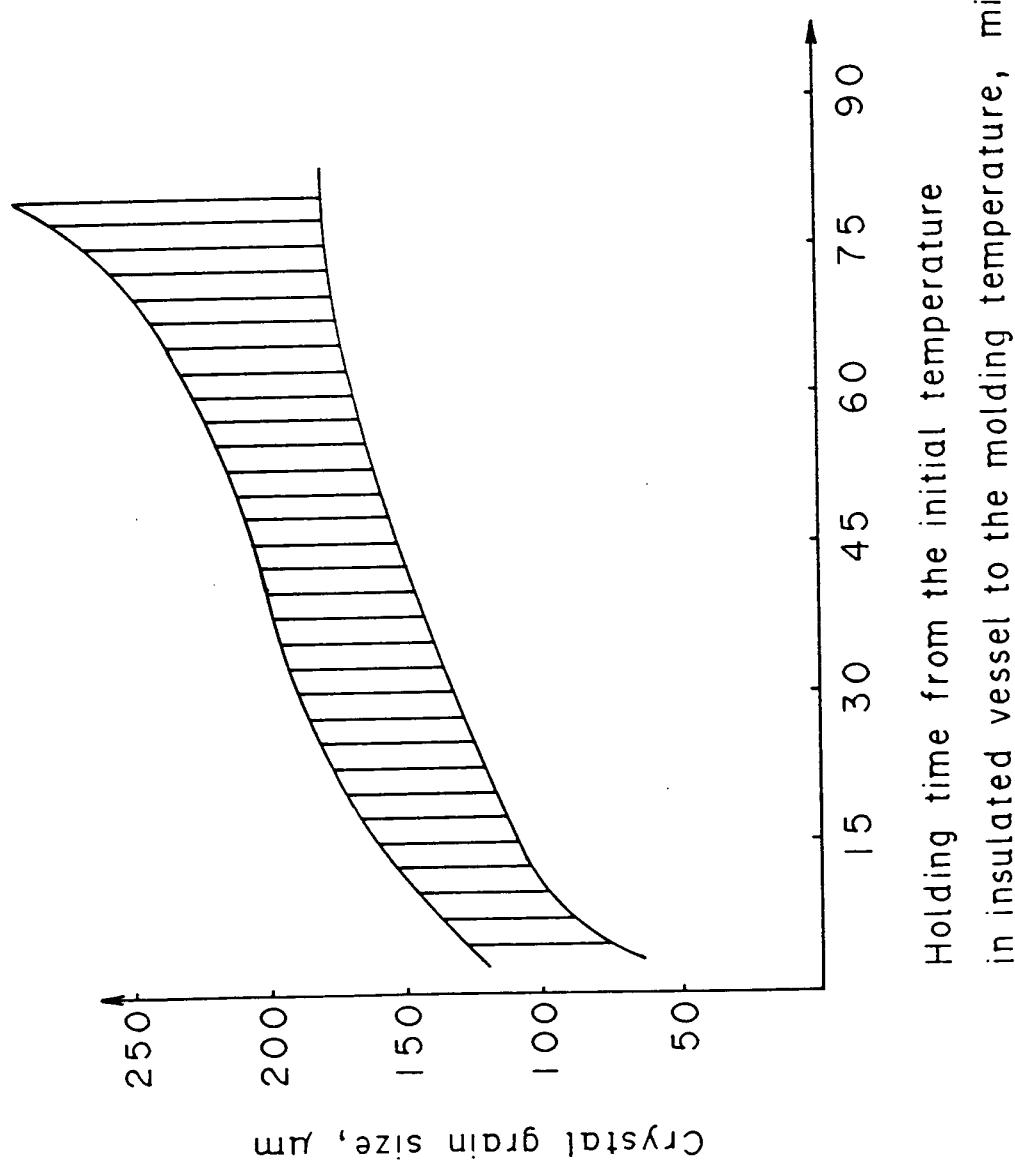


FIG. 16

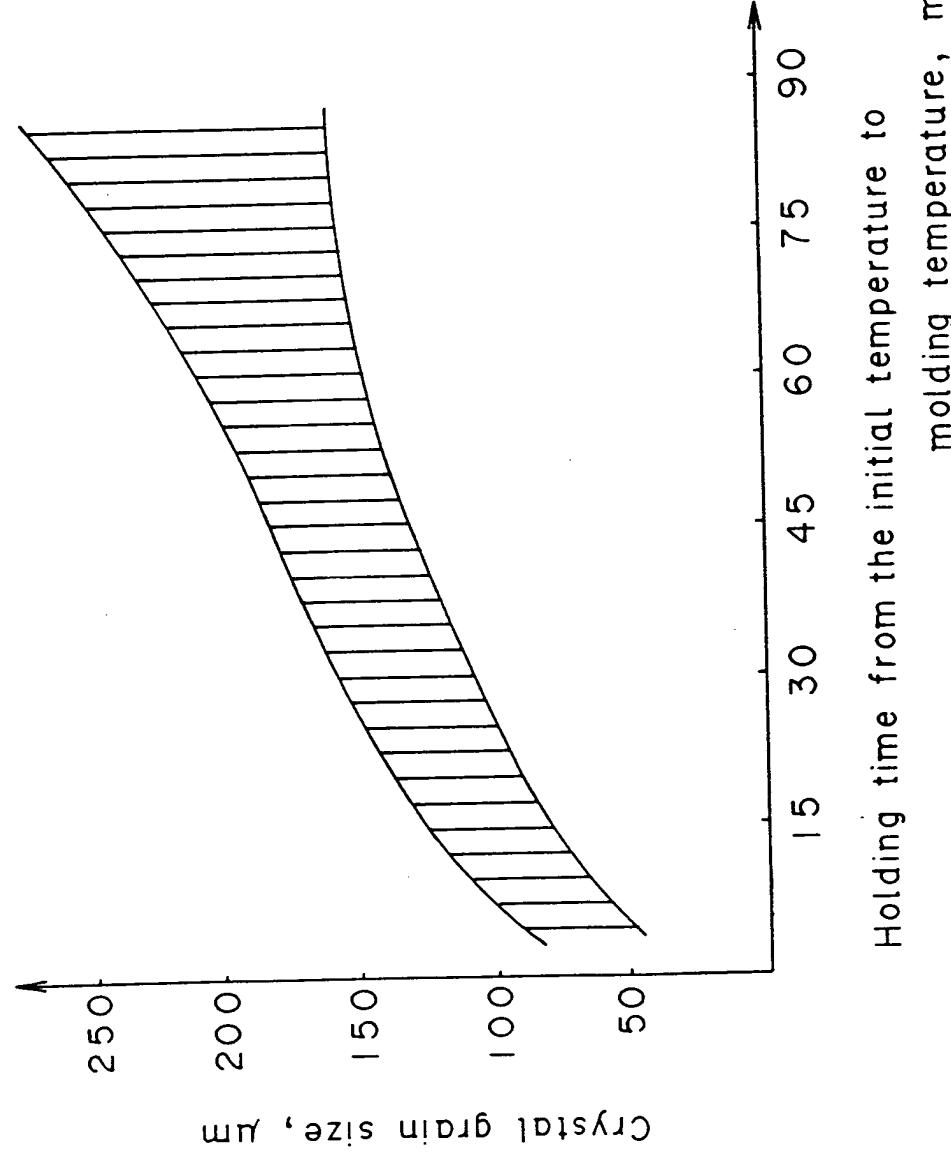


FIG. 17

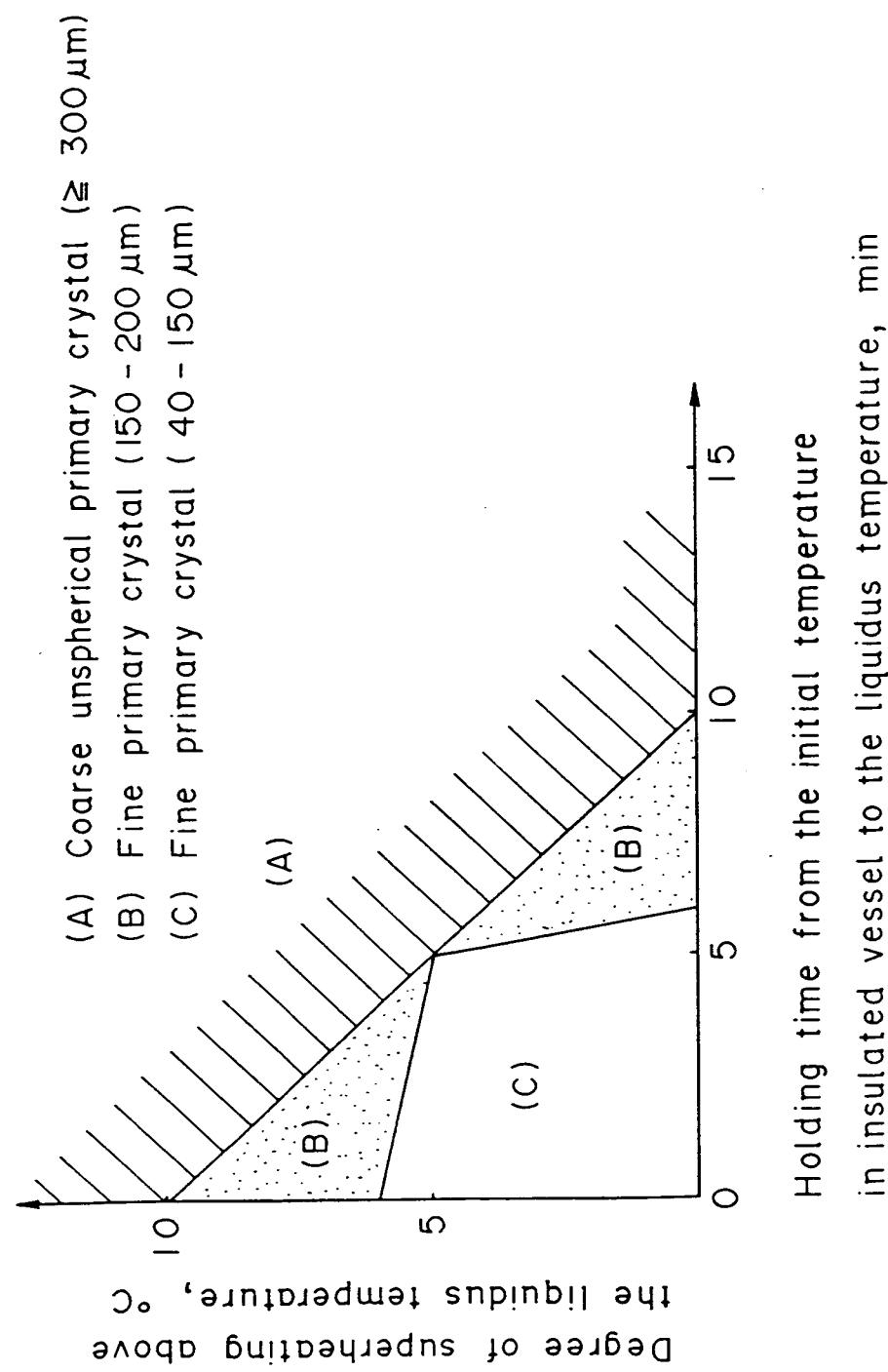


FIG. 18

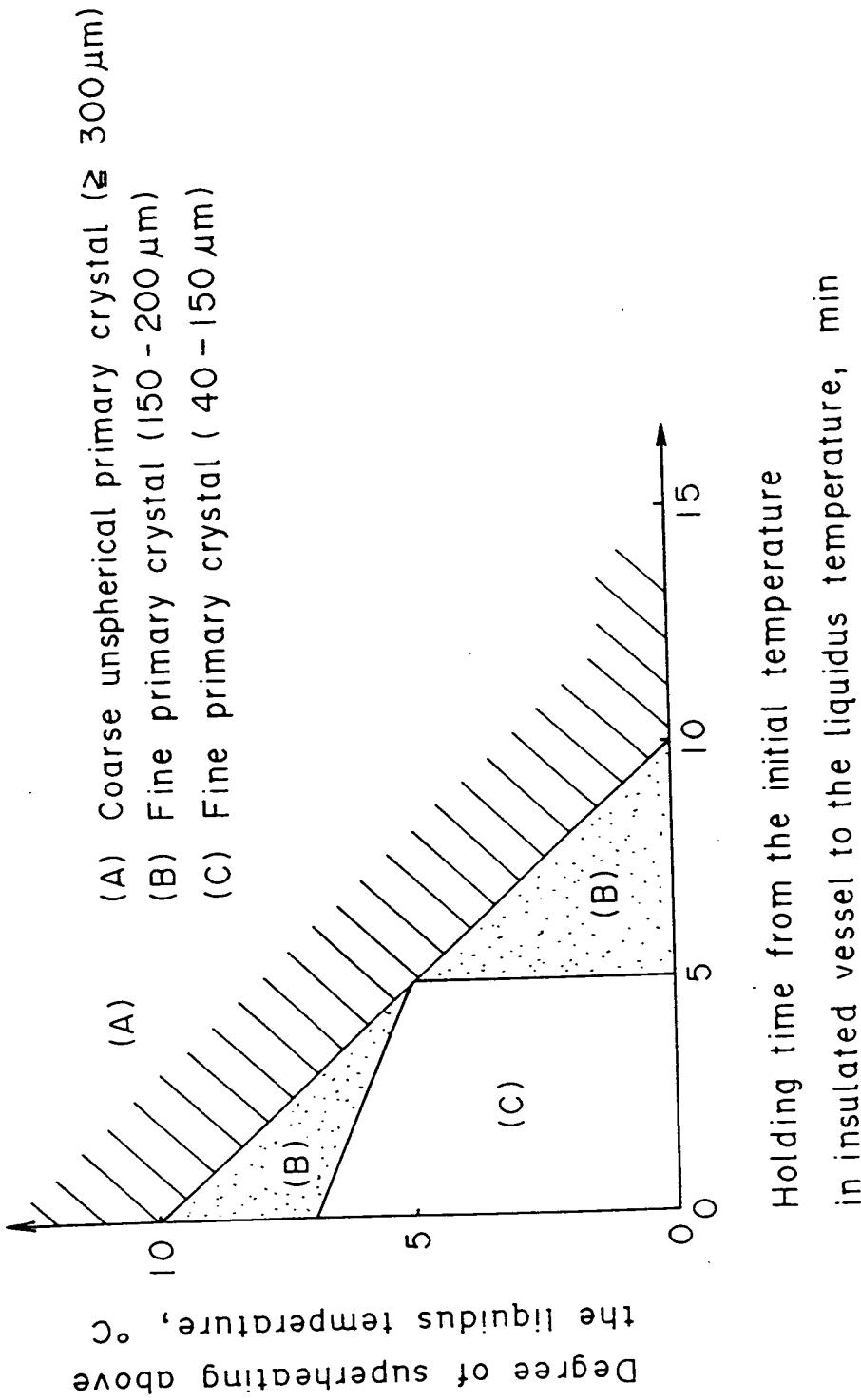
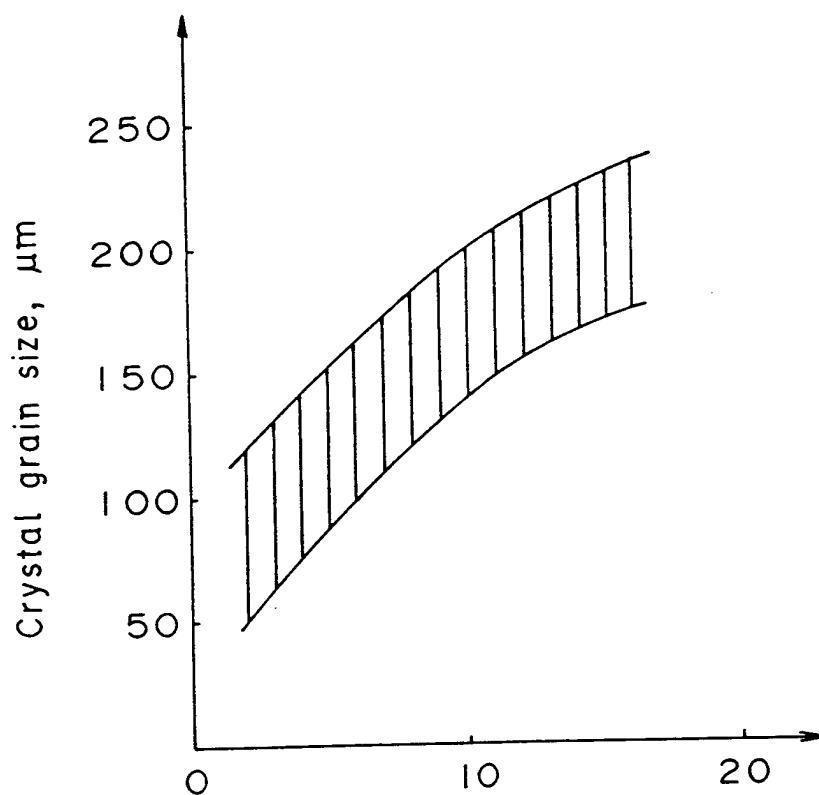


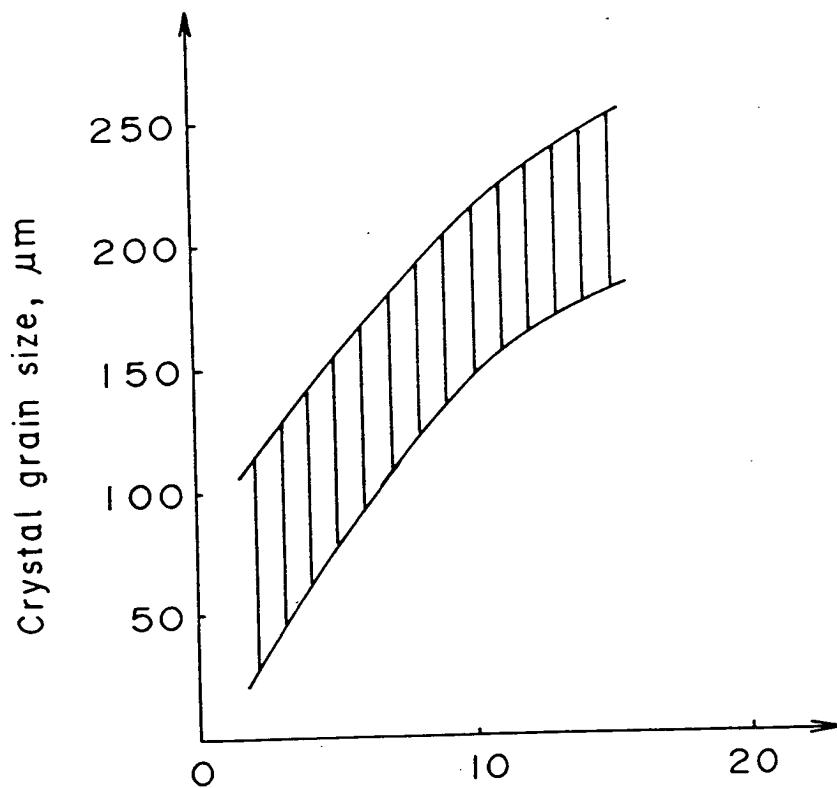
FIG. 19



Holding time from the initial temperature
in insulated vessel to the liquidus
temperature minus 5°C, min

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FIG. 20



Holding time from the initial temperature
in insulated vessel to the liquidus
temperature minus 5°C , min

FIG. 21

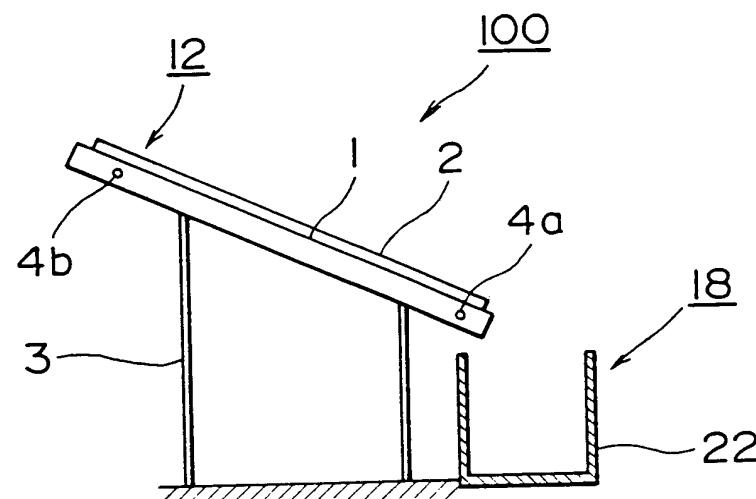


FIG. 22

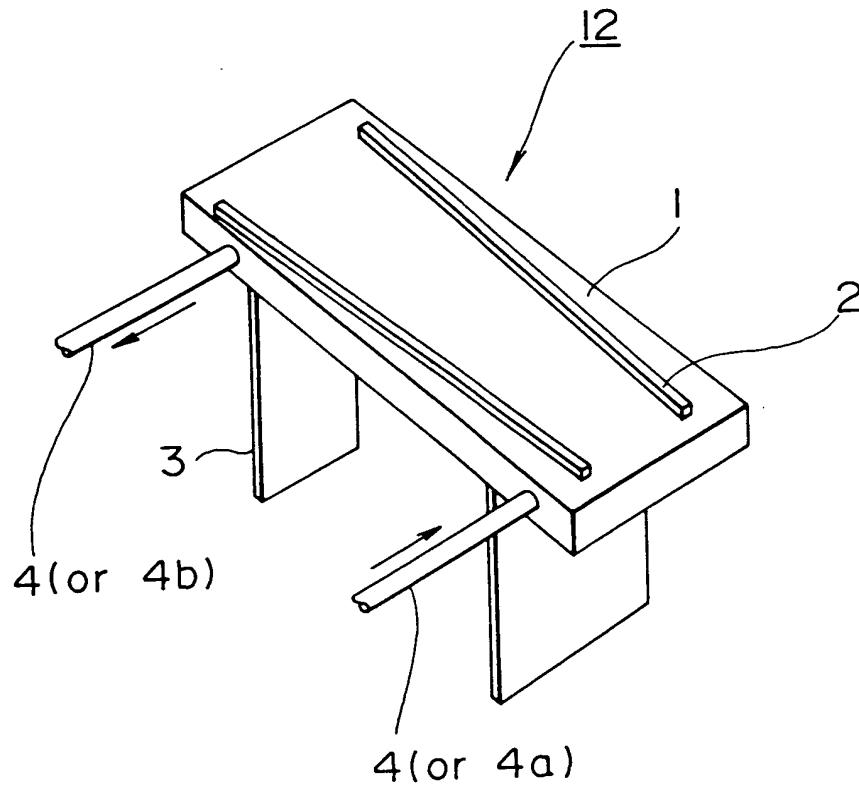


FIG. 23(a)

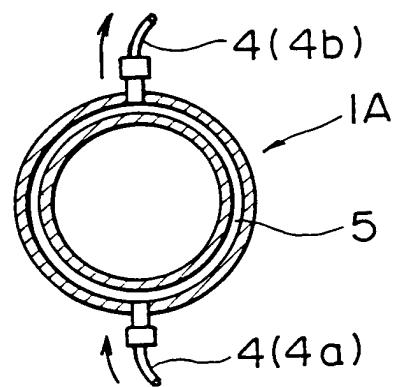


FIG. 23(b)

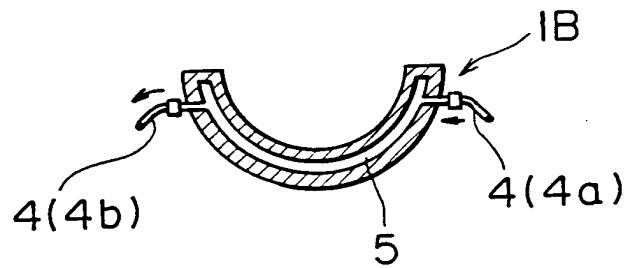


FIG. 24

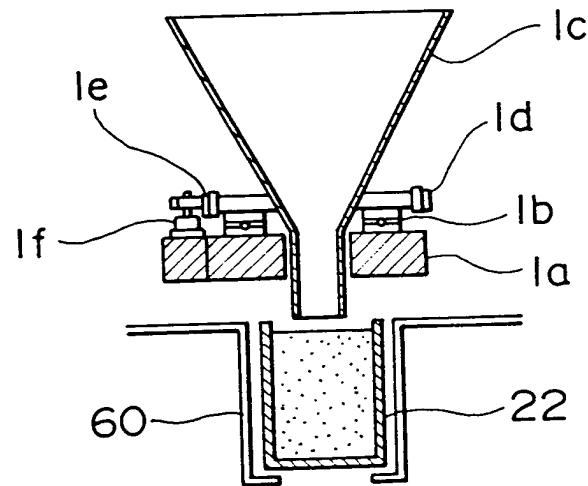


FIG. 25

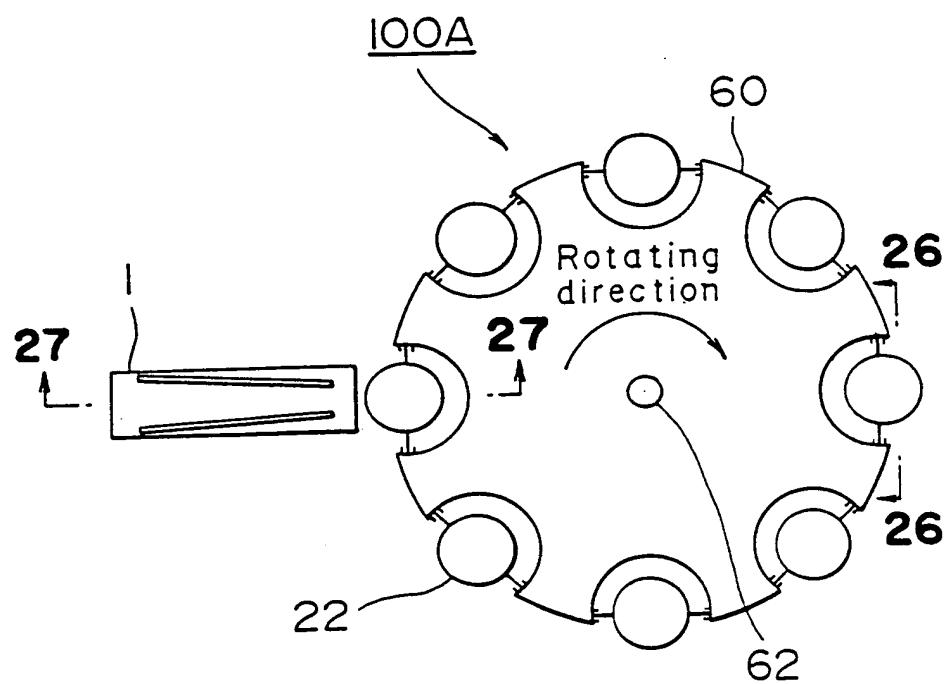
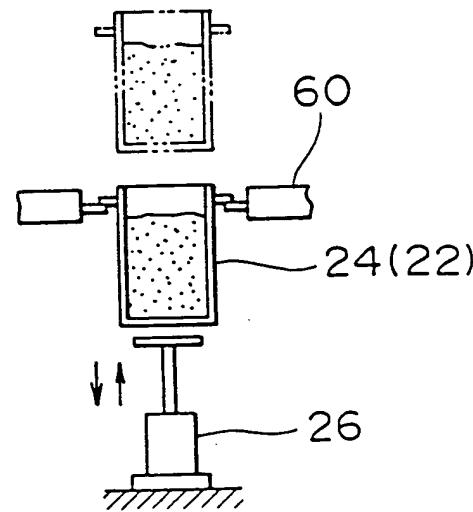


FIG. 26



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FIG. 27

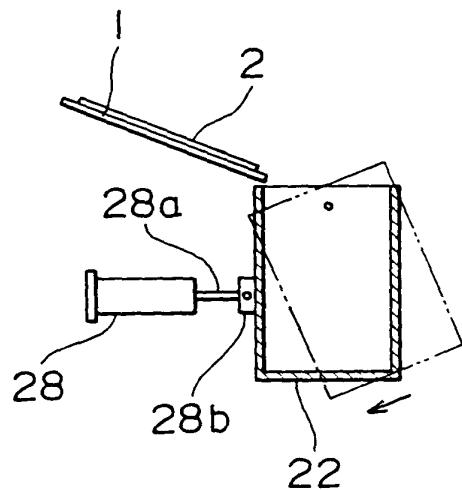
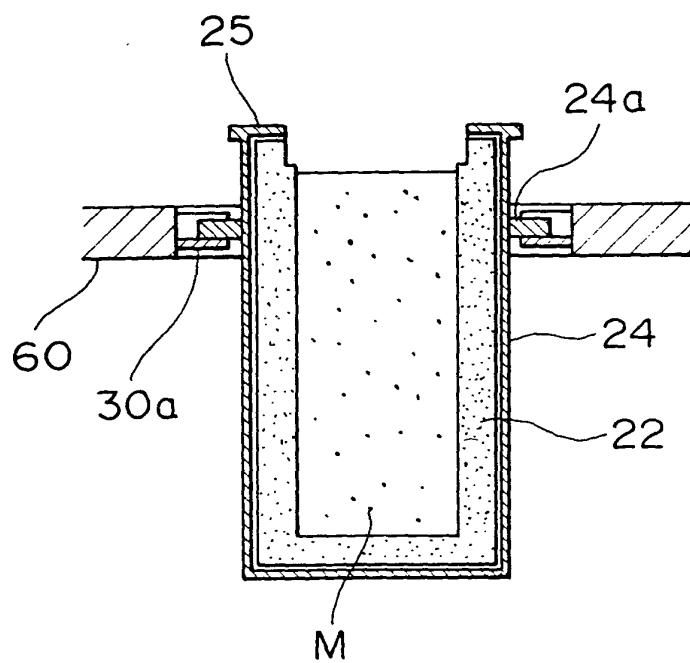


FIG. 28



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CLASSIFIED
DRAFTSMAN

FIG. 29

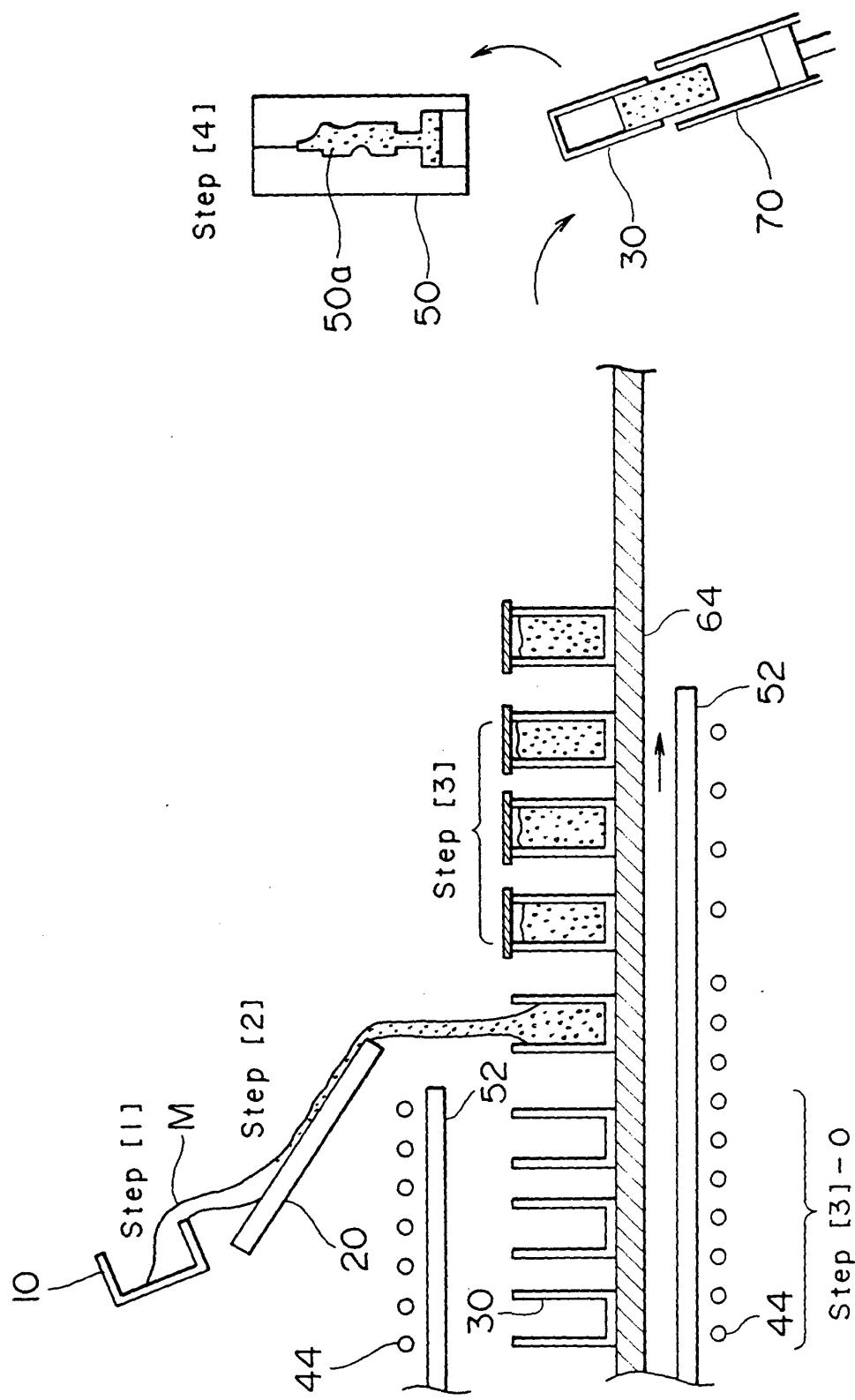


FIG. 30(a)
Left to cool at
both top and bottom

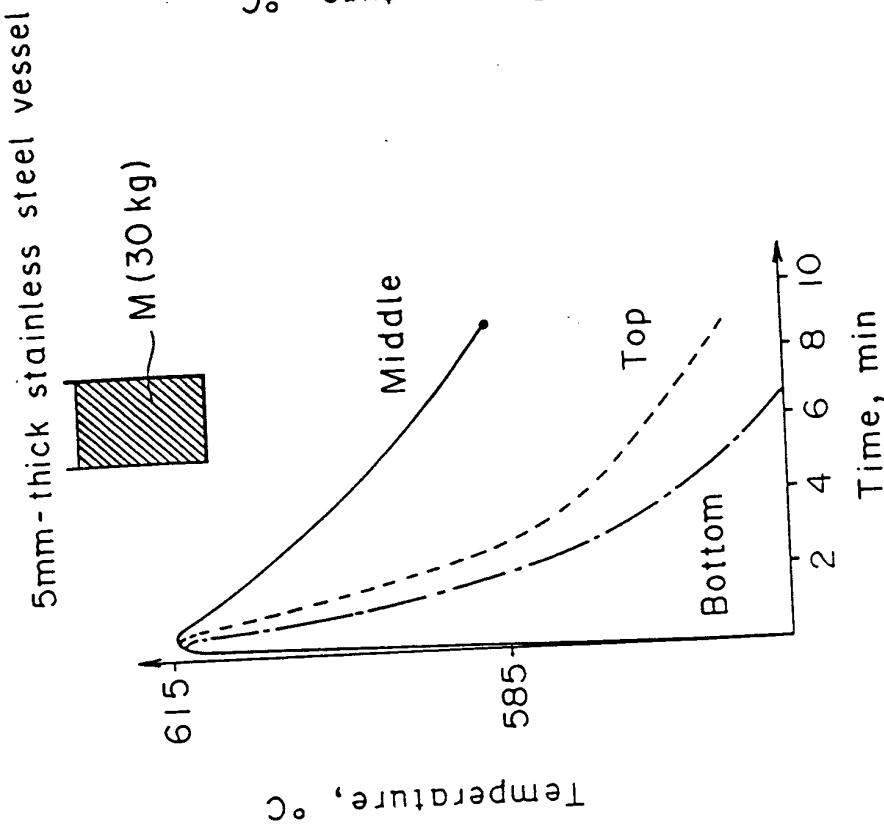


FIG. 30(b)
Heat-retained at top
but heated at bottom

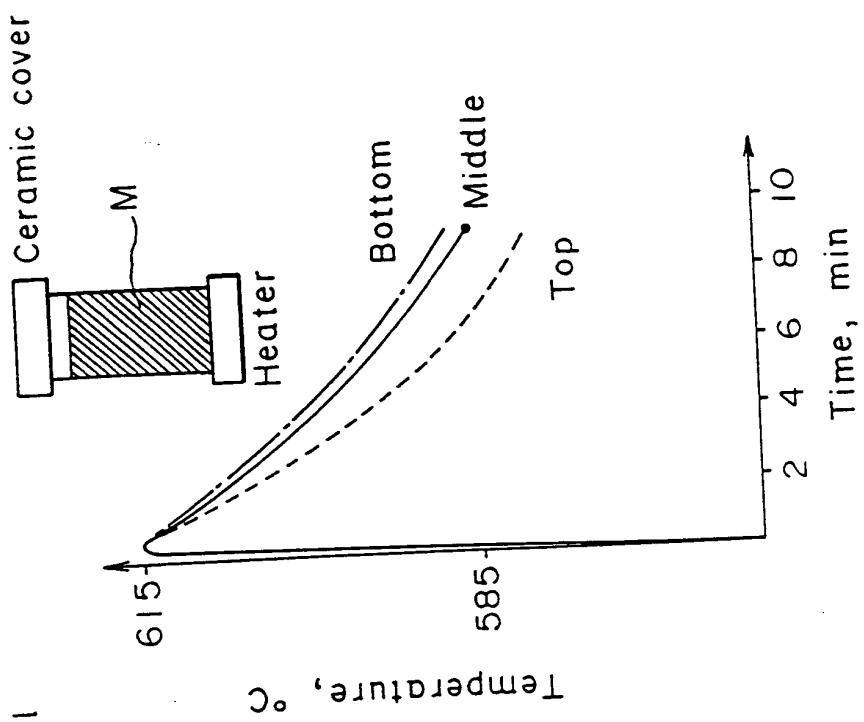
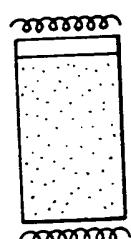


FIG. 3I(a)

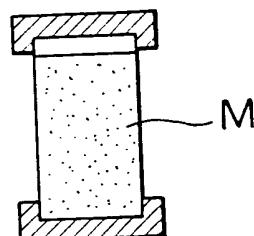
Heated



Heated

FIG. 3I(b)

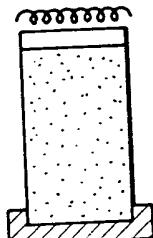
Heat-retained



Heat-retained

FIG. 3I(c)

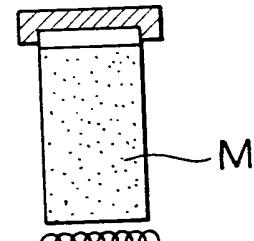
Heated



Heat-retained

FIG. 3I(d)

Heat-retained



Heated

FIG. 32

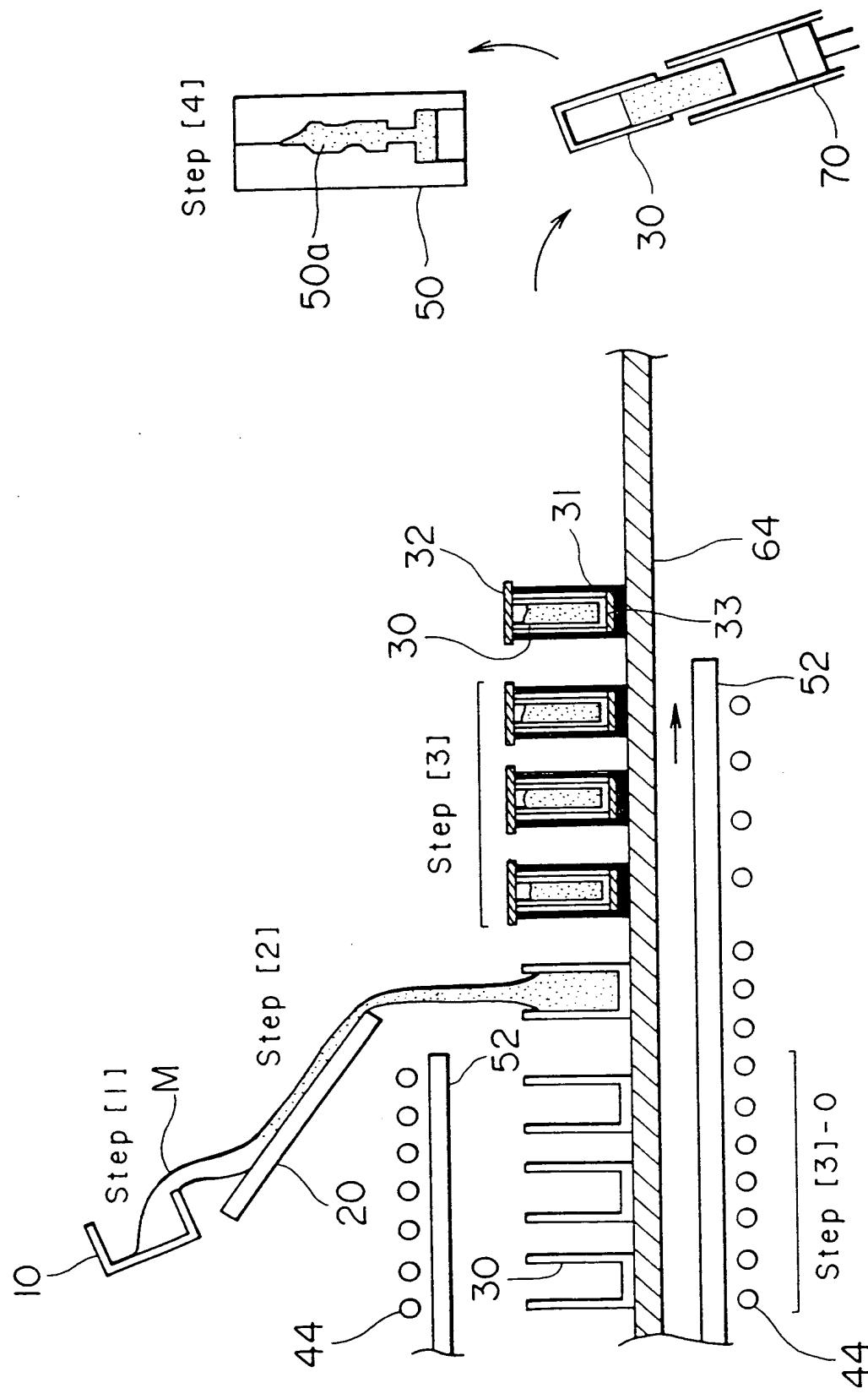


FIG. 33(a)

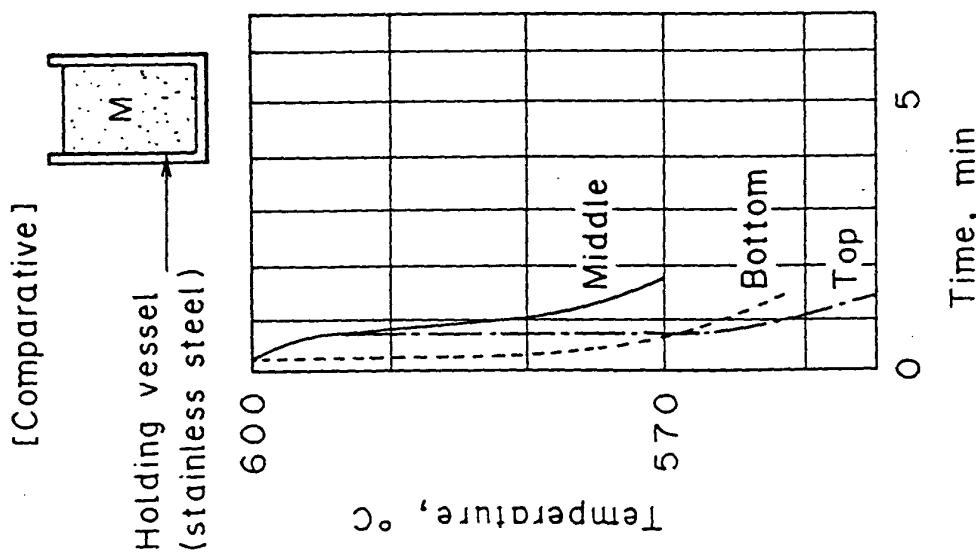
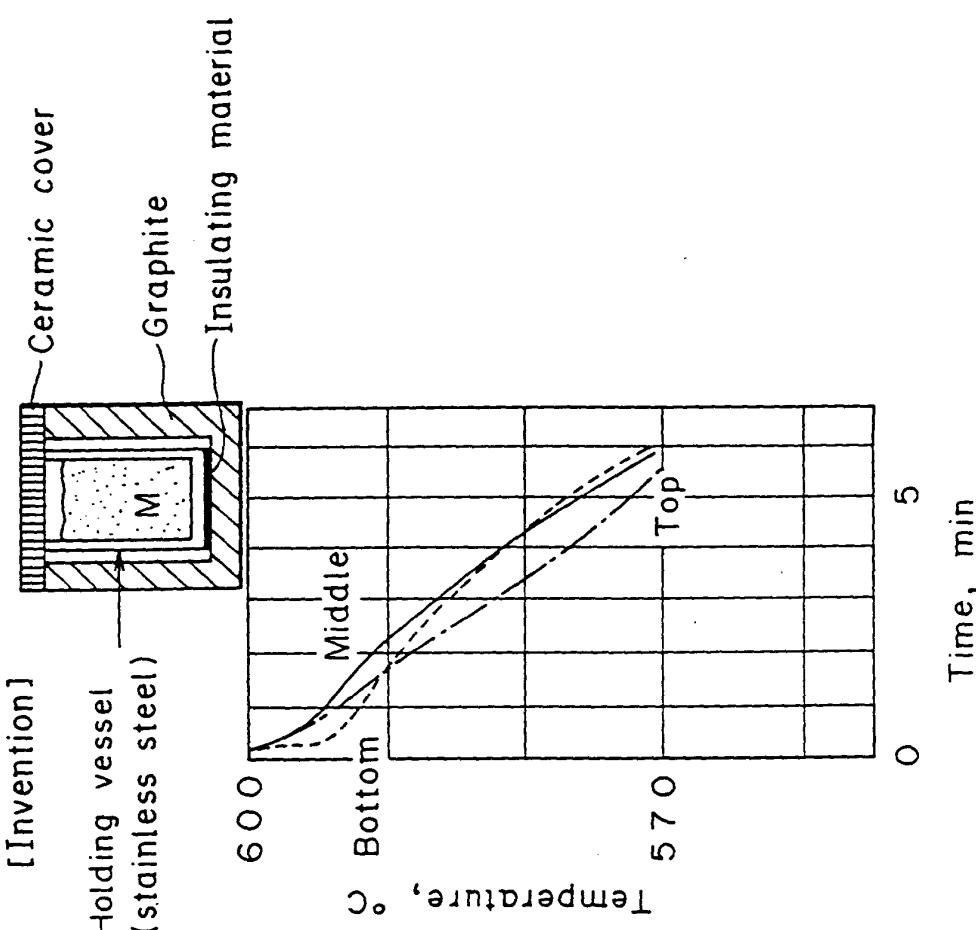
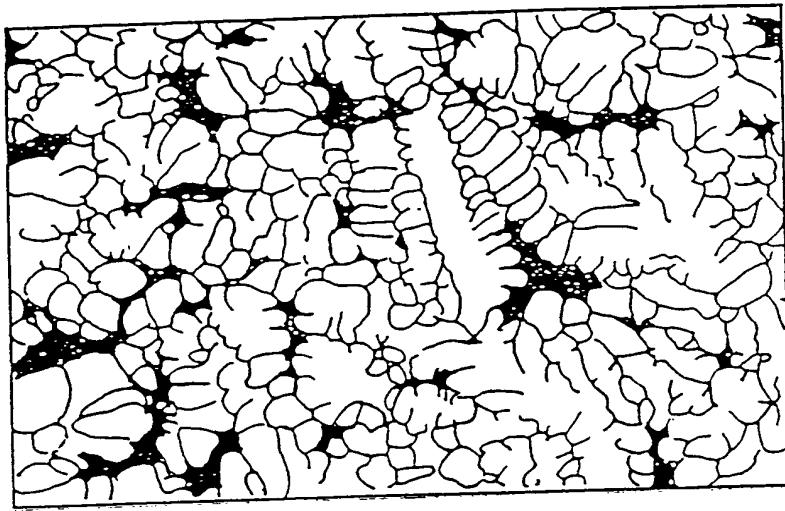


FIG. 33(b)



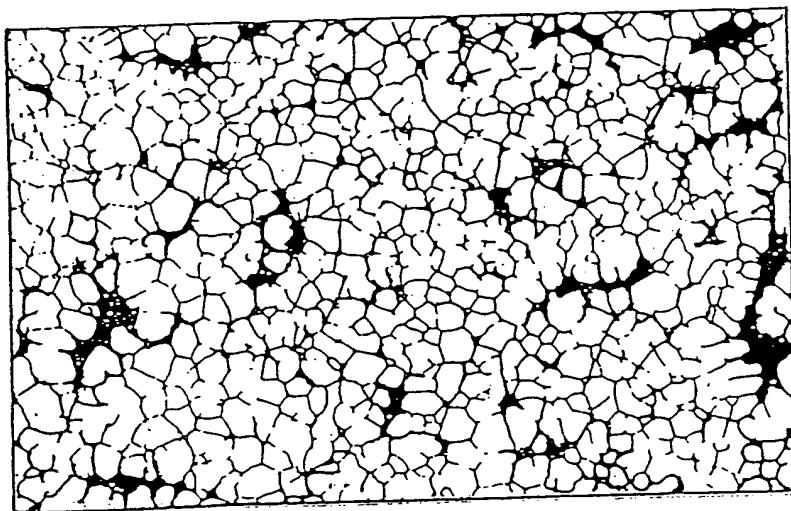
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DRAFTSMAN

FIG. 34 Prior Art



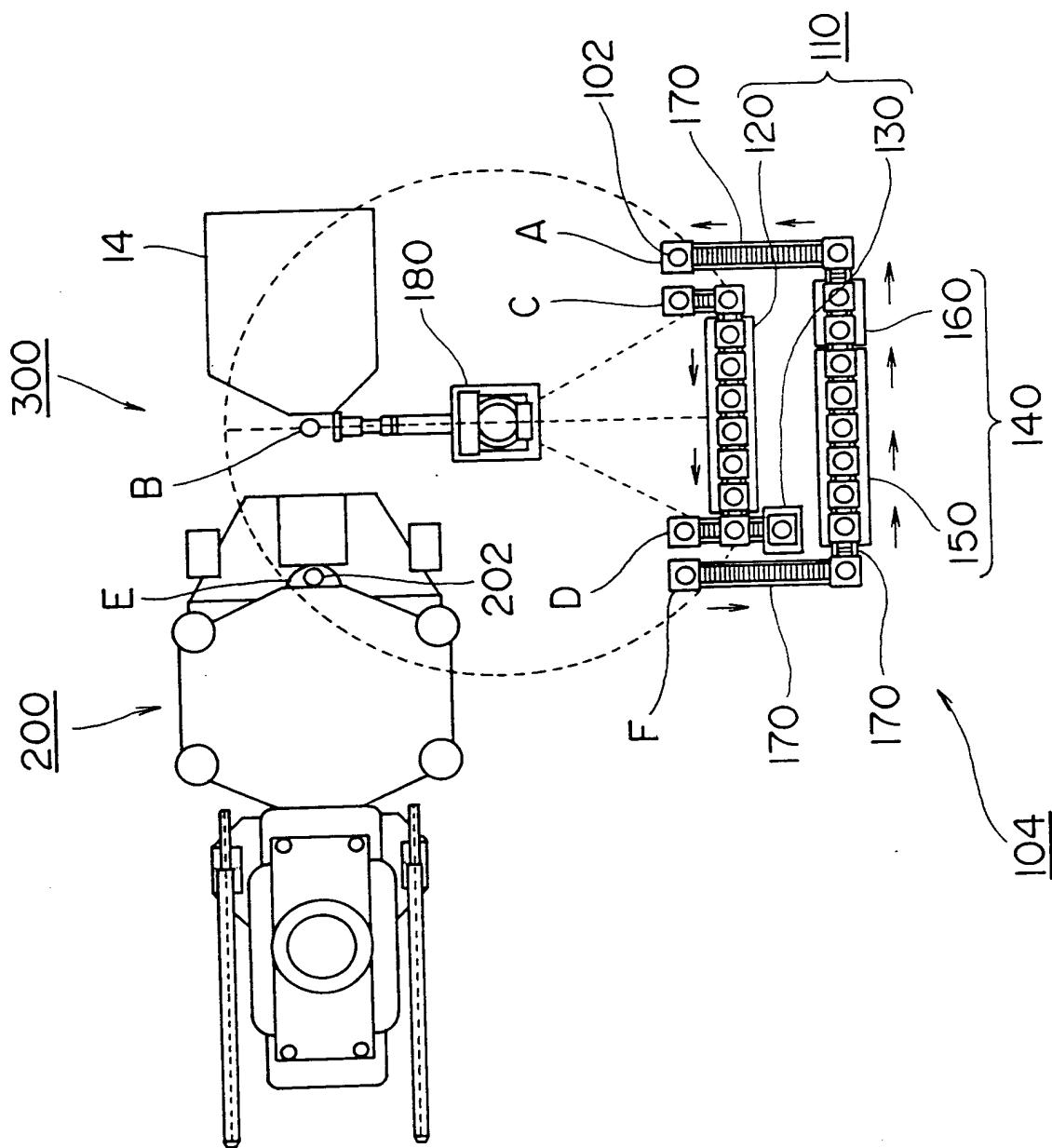
200 μ m
[

FIG. 35



200 μ m
[

FIG. 36



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BY
CLASS SUBCLAS
CRAFTSMAN

FIG. 37

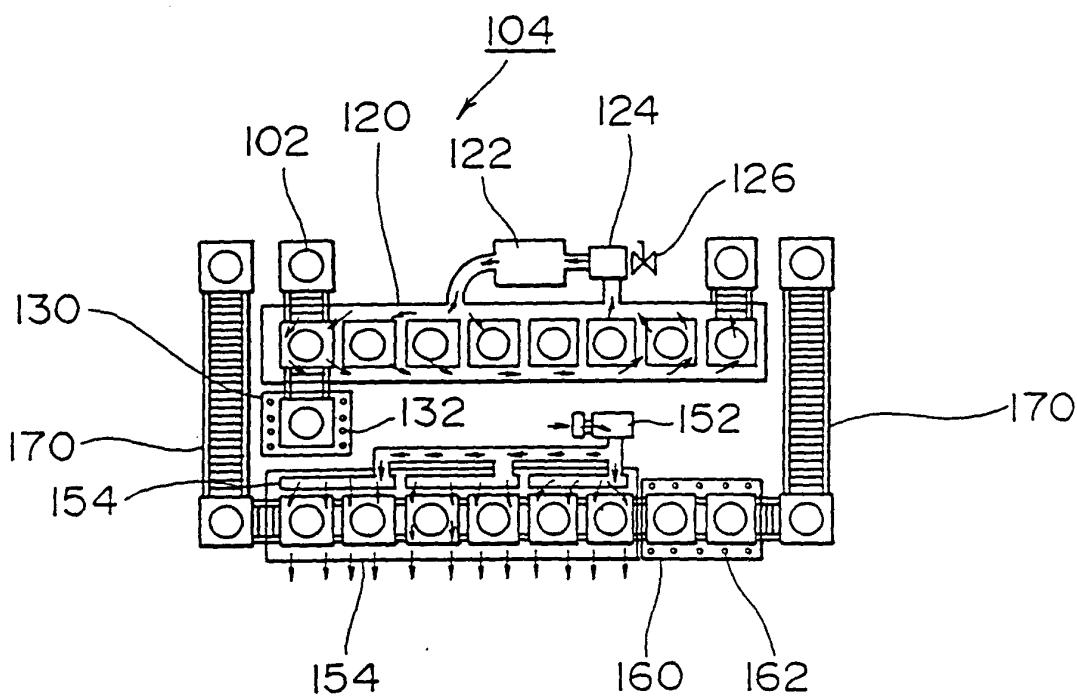


FIG. 38

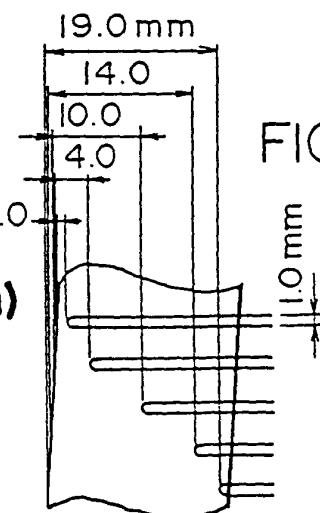
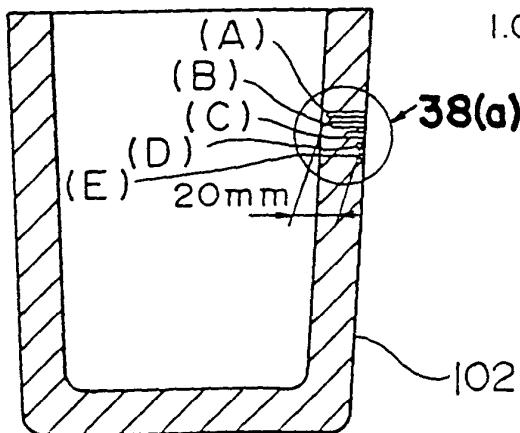
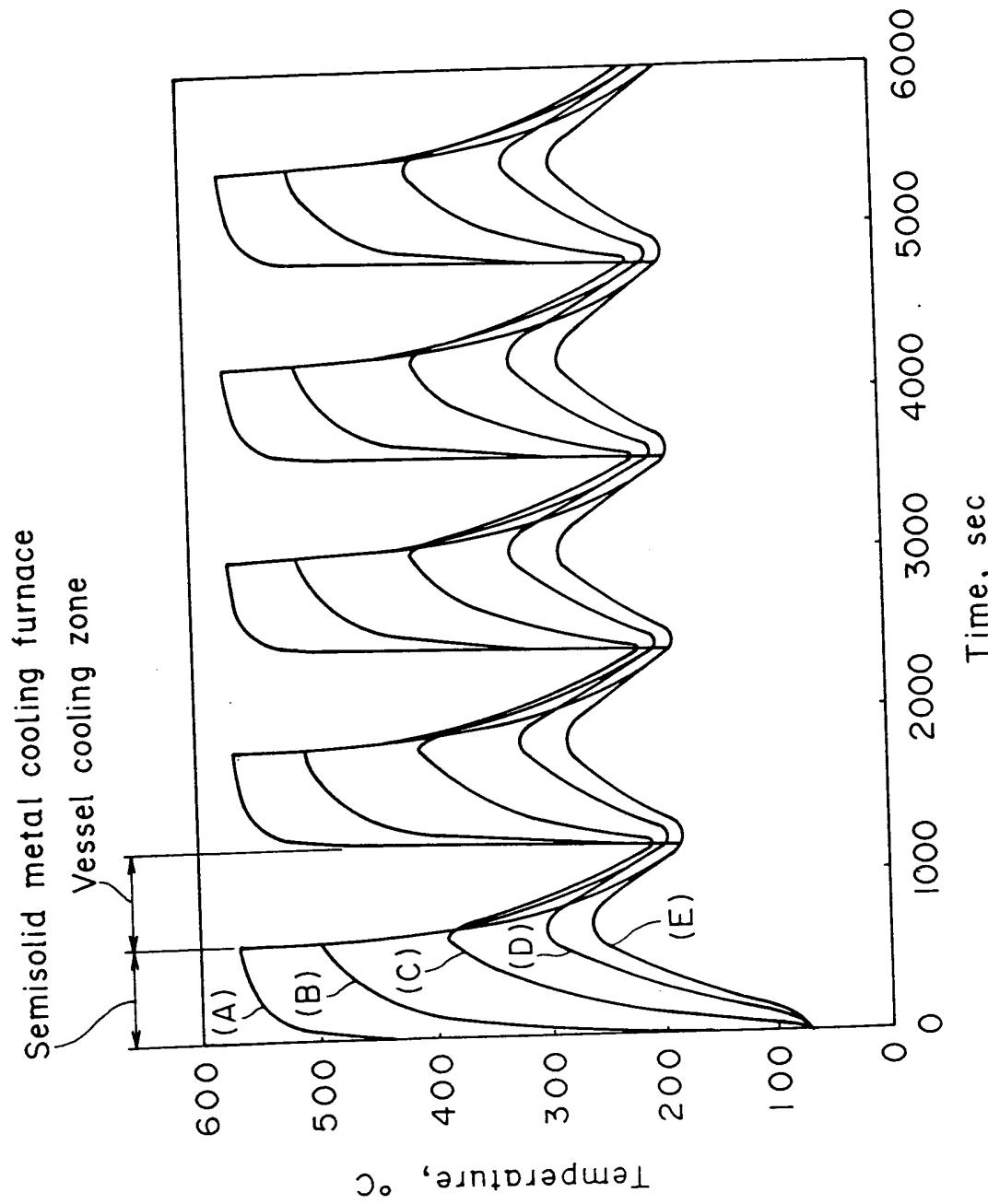


FIG. 38(a)

FIG. 39



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BY	CLASS SUECD	BY
DRAFTSMAN		

FIG. 40

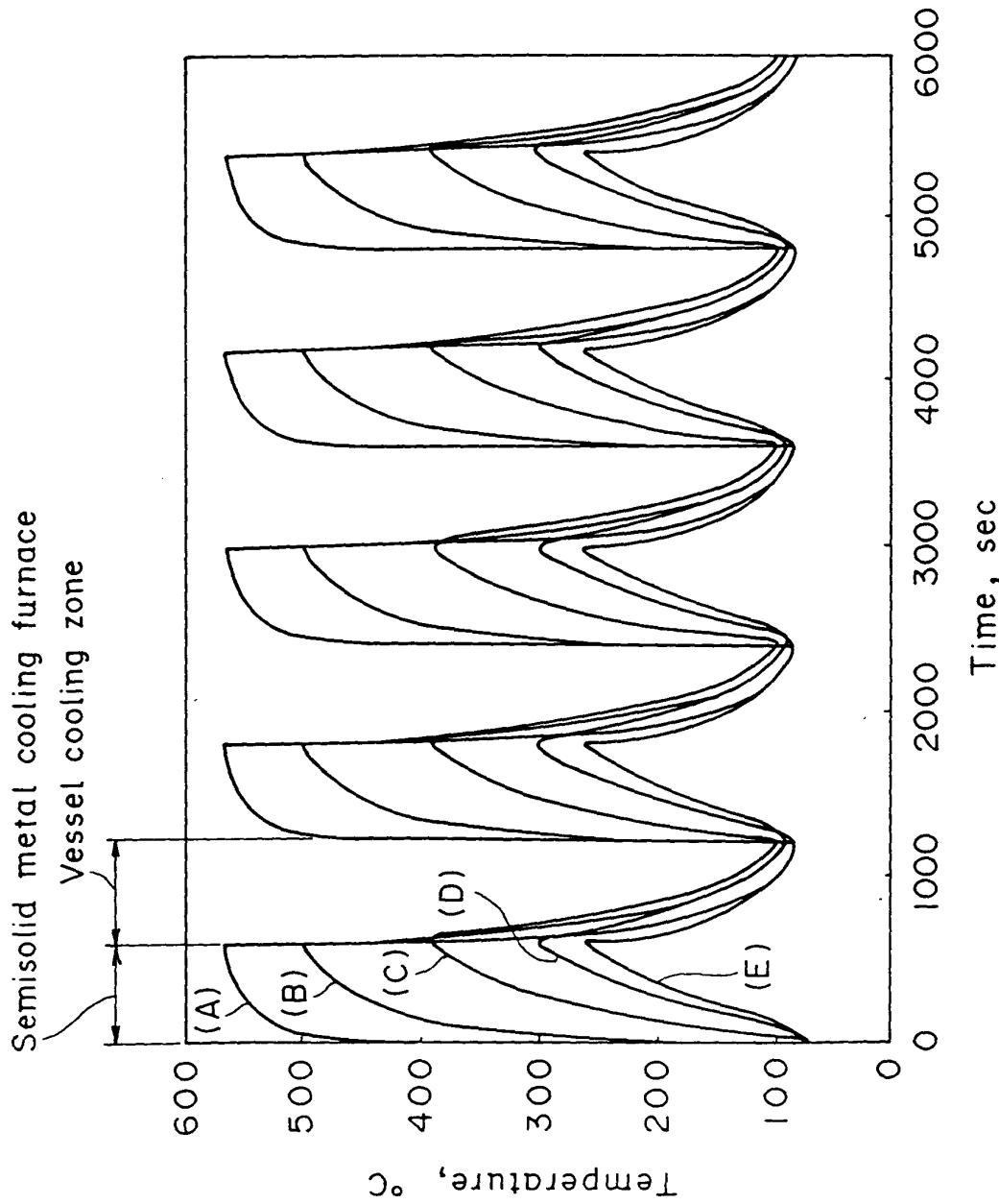


FIG. 41

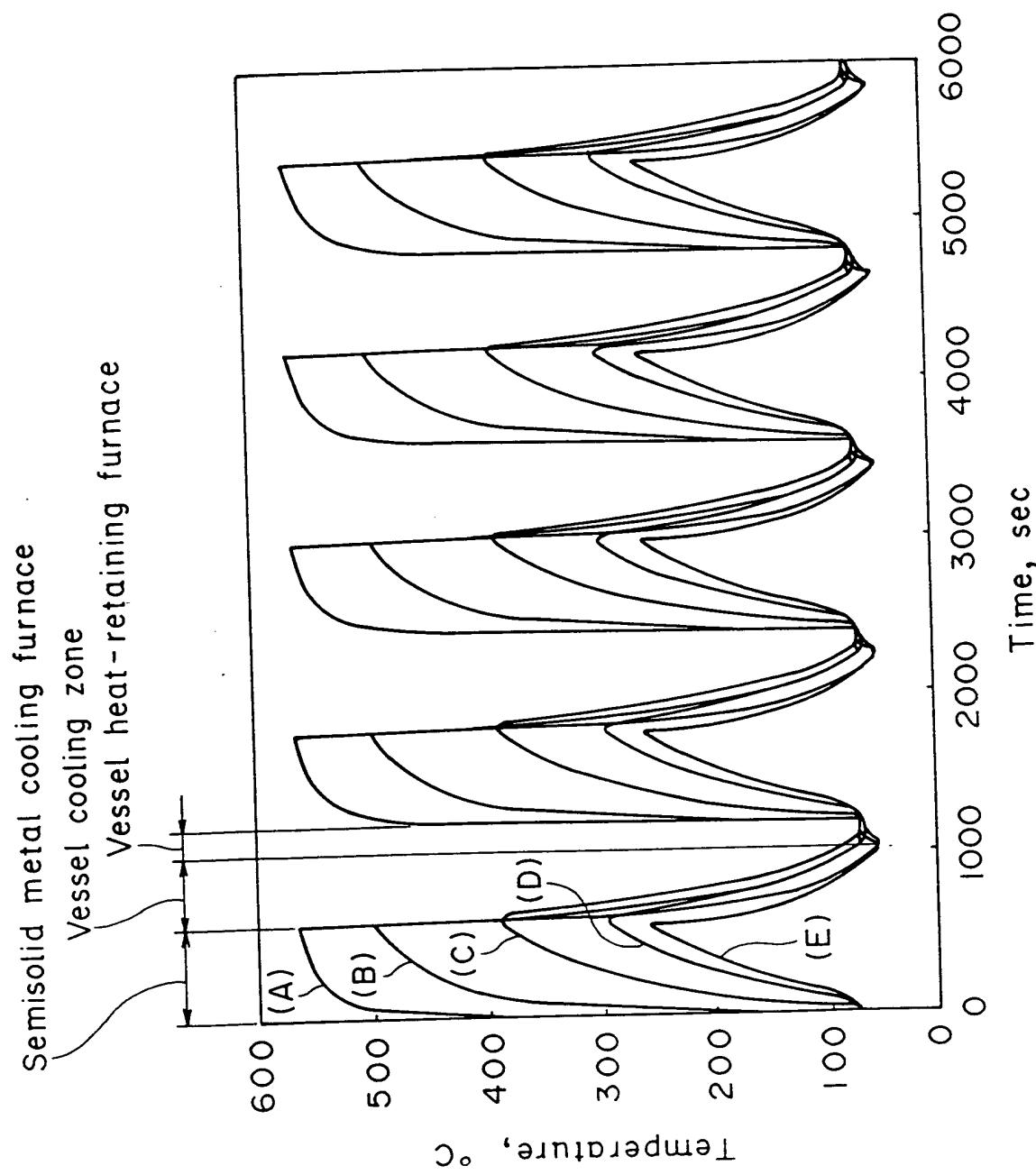


FIG. 42

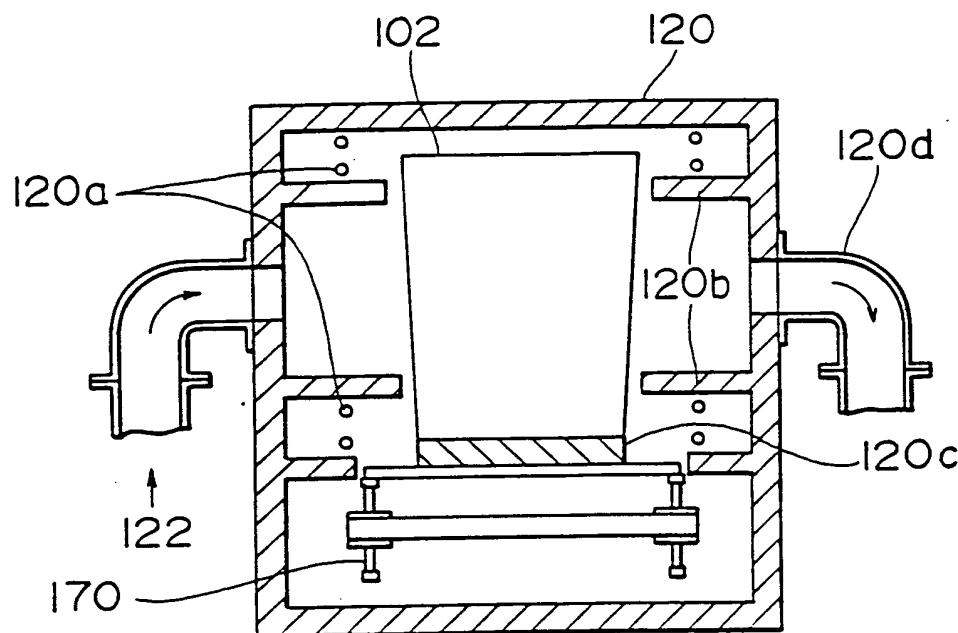


FIG. 43

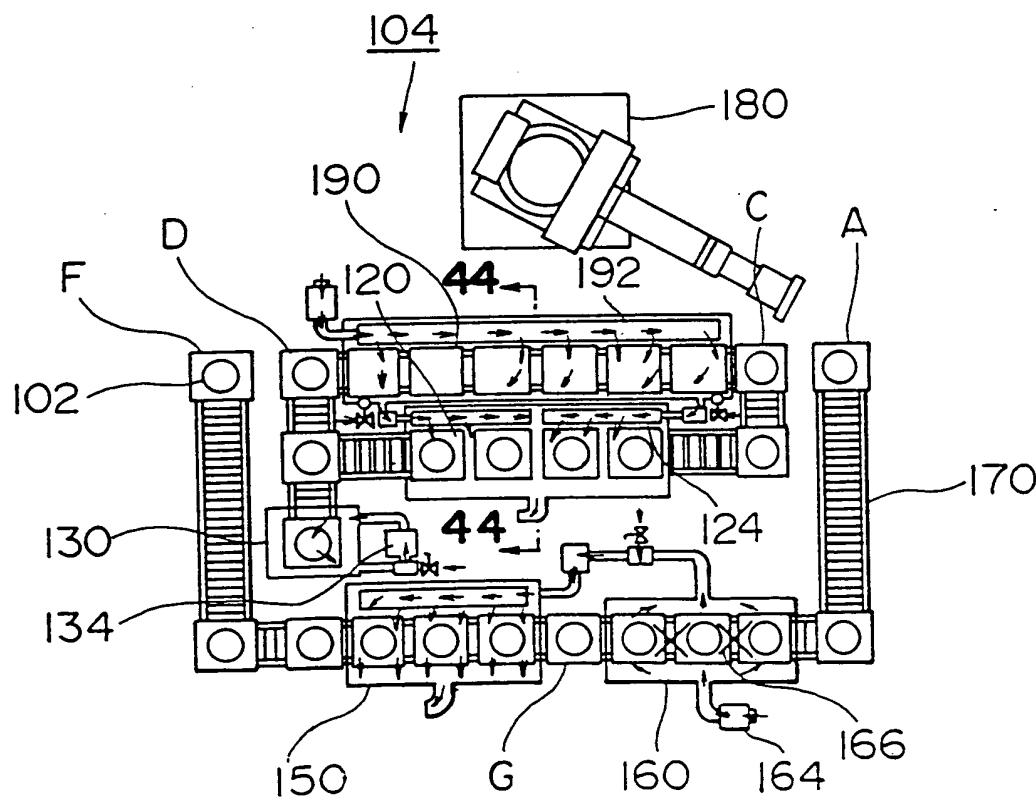


FIG. 44

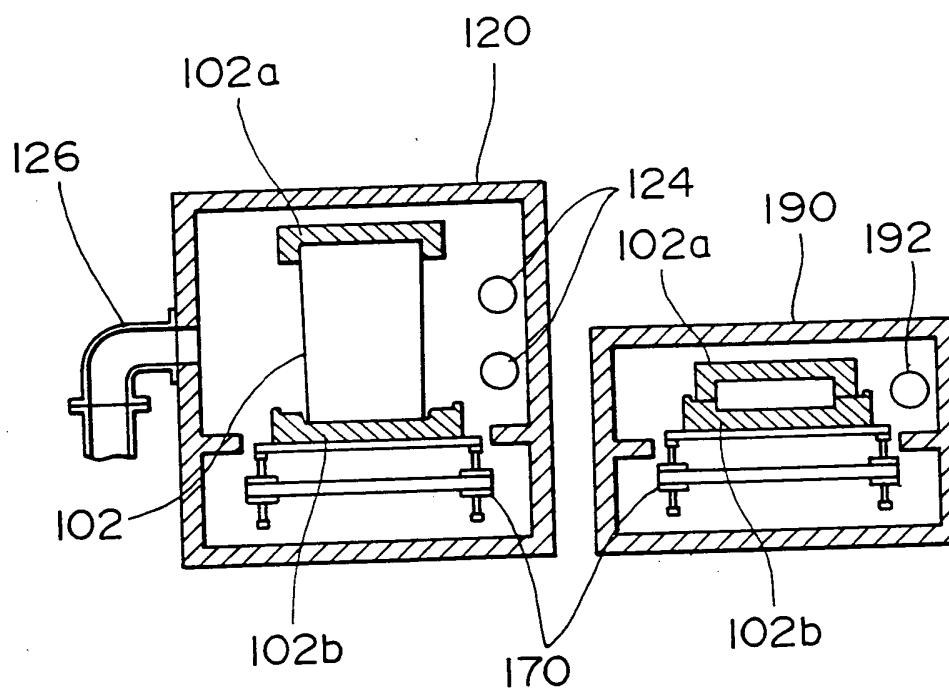


FIG. 45(a)
SUS304
preheated to 200°C
Temperature of atmosphere: 200°C

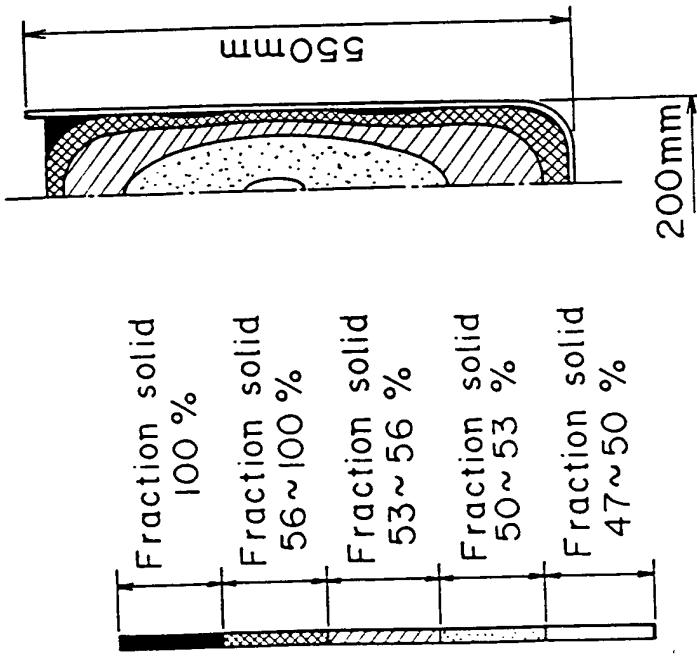


FIG. 45(b)
SUS304
preheated to 200°C
Temperature of atmosphere: 200°C

FIG. 45(c)
 $\text{Al}_2\text{O}_3-\text{SiO}_2$ composite
preheated to 200°C

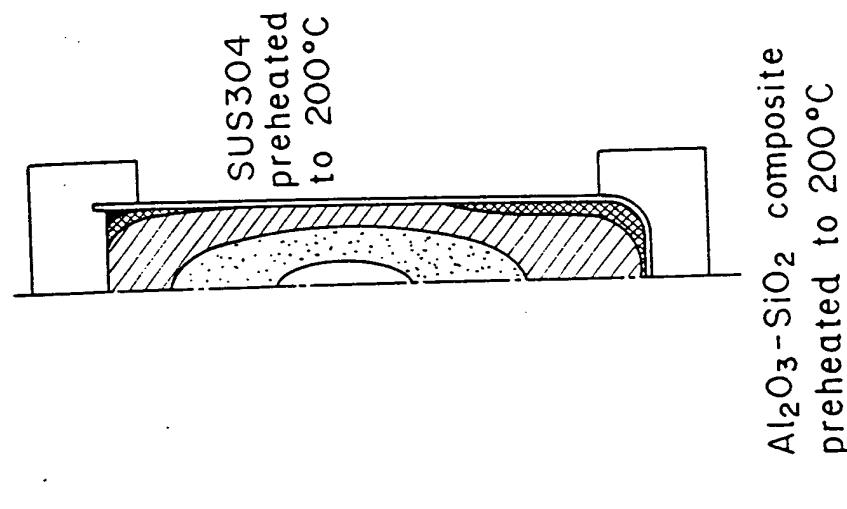


FIG. 45(d)
 $\text{Al}_2\text{O}_3-\text{SiO}_2$ composite
preheated to 350°C

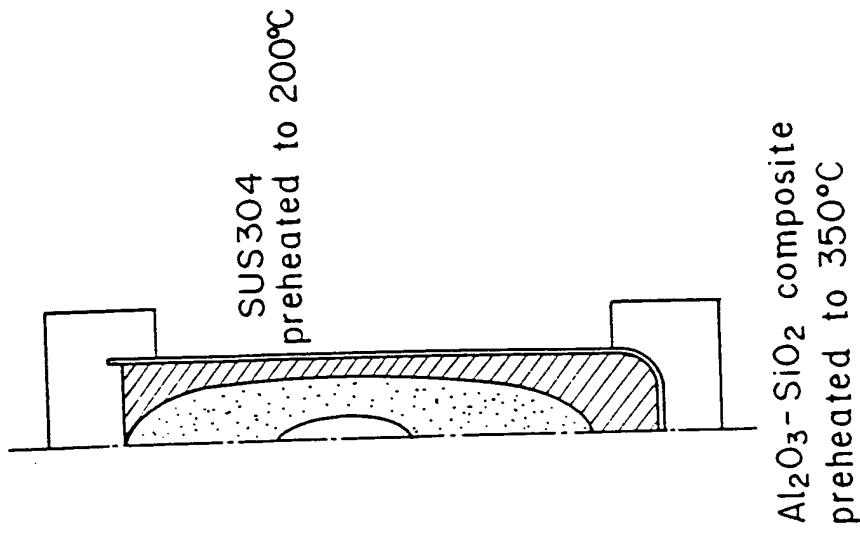


FIG. 46

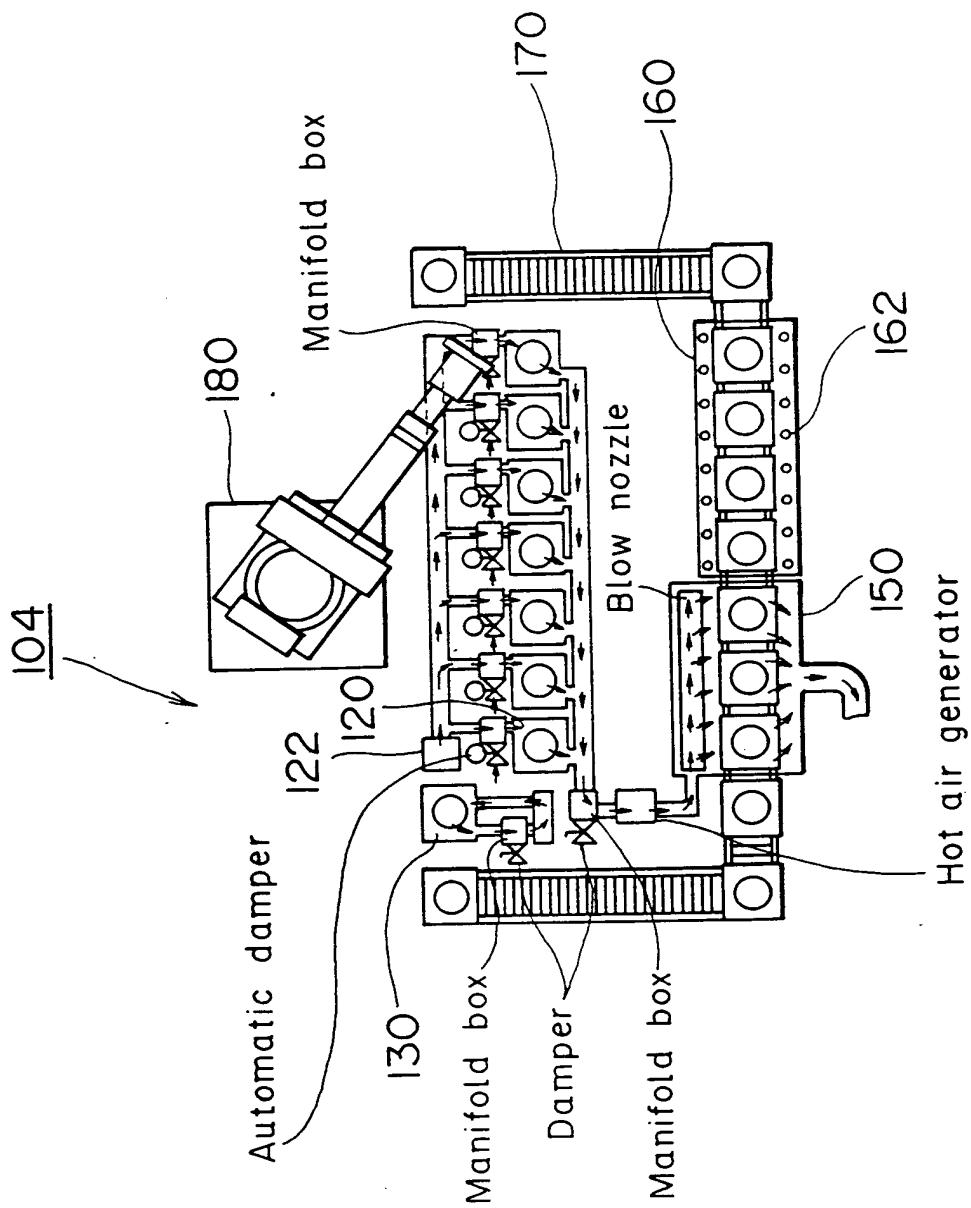
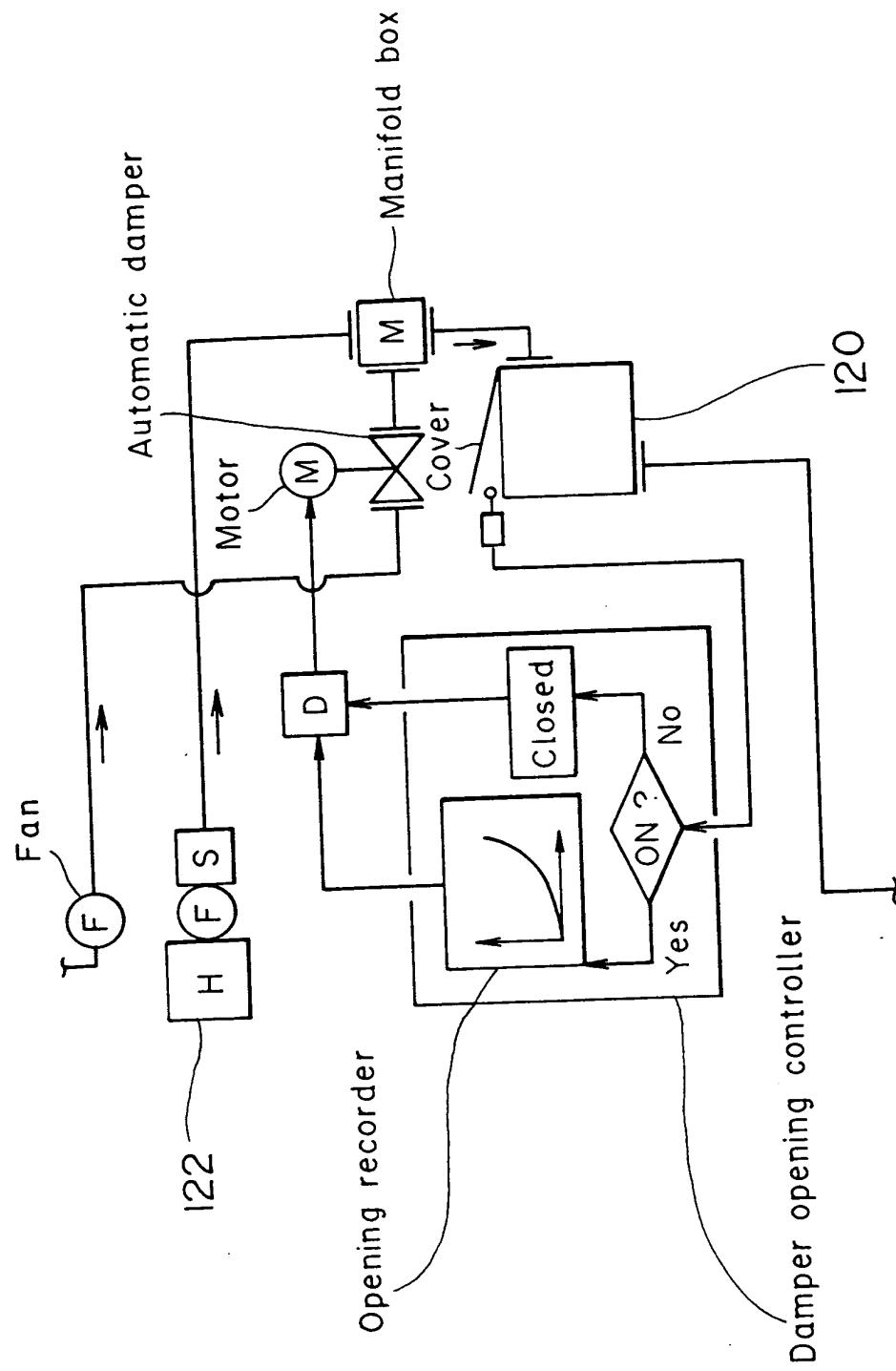


FIG. 47



APPROVE	BY	CLASS	SUBCLAS
DRAFTSMAN			

FIG. 48

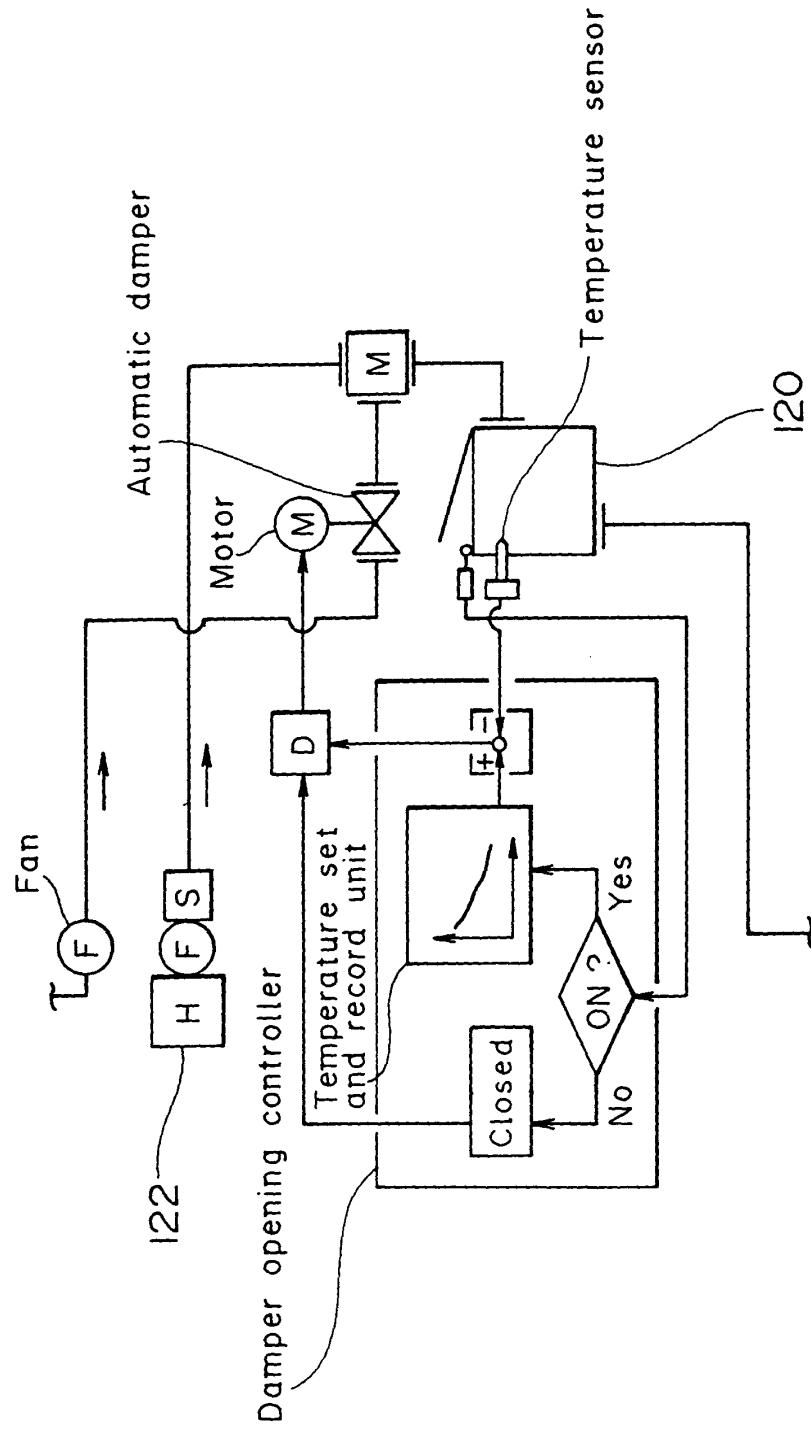


FIG. 49

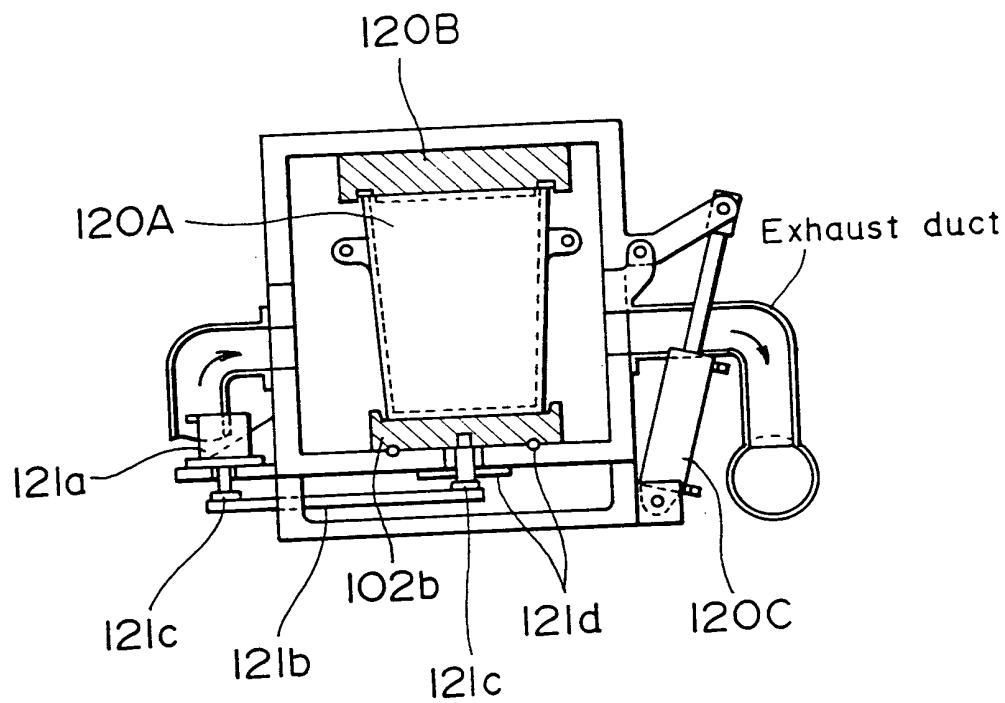
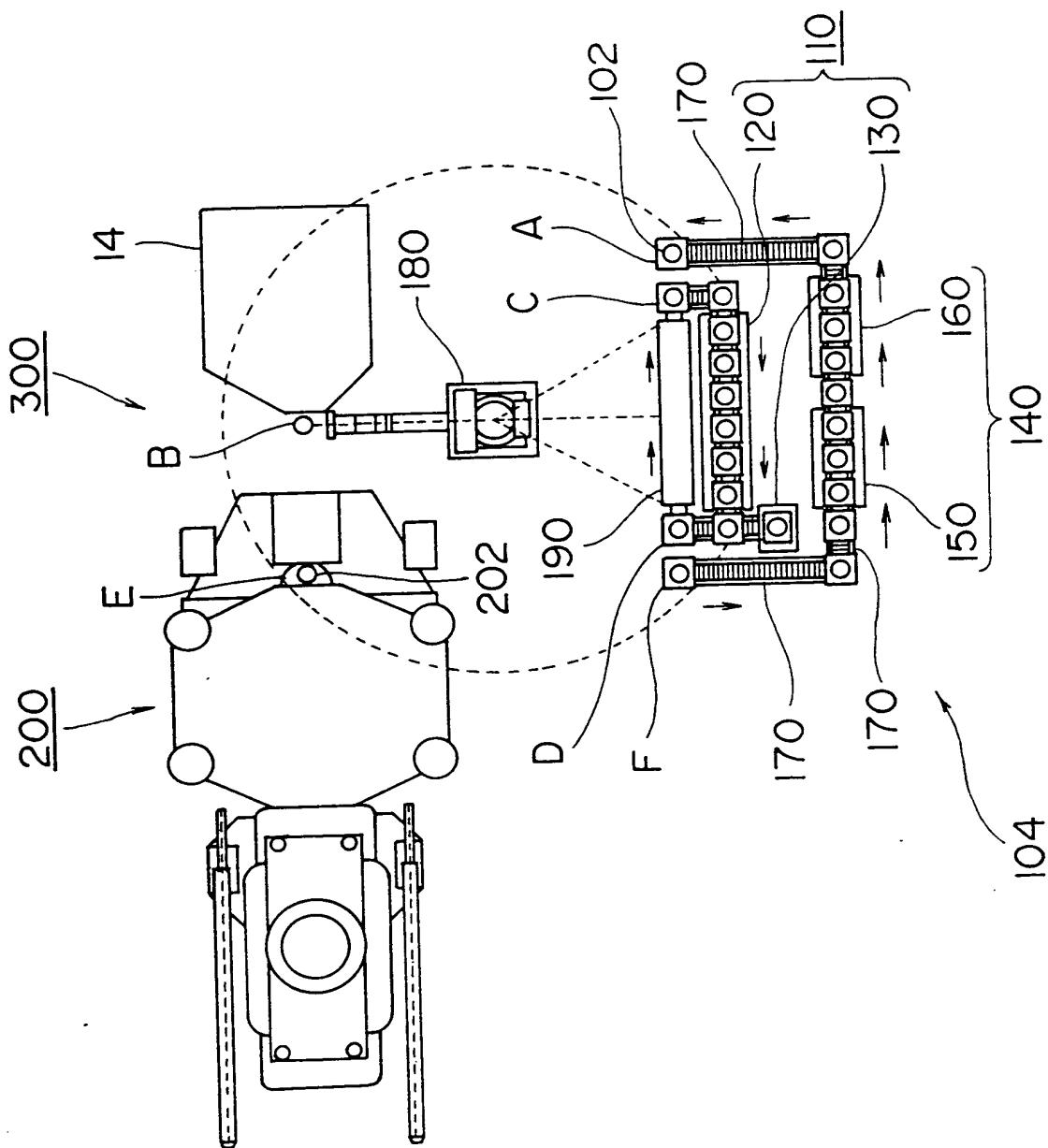


FIG. 50



APPROVED
BY
DRAFTSMAN

CLASS SUBCL.

FIG. 5I

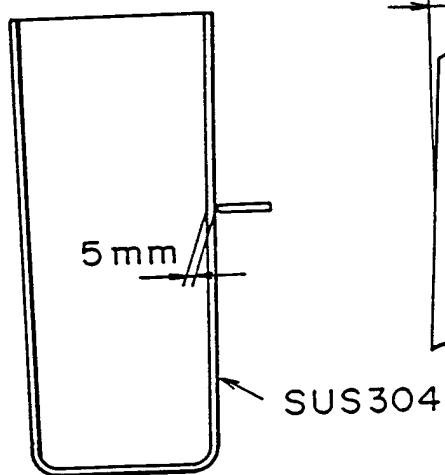


FIG. 5I(a)

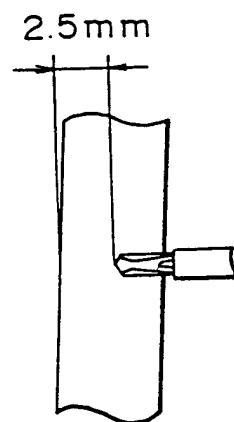


FIG. 52

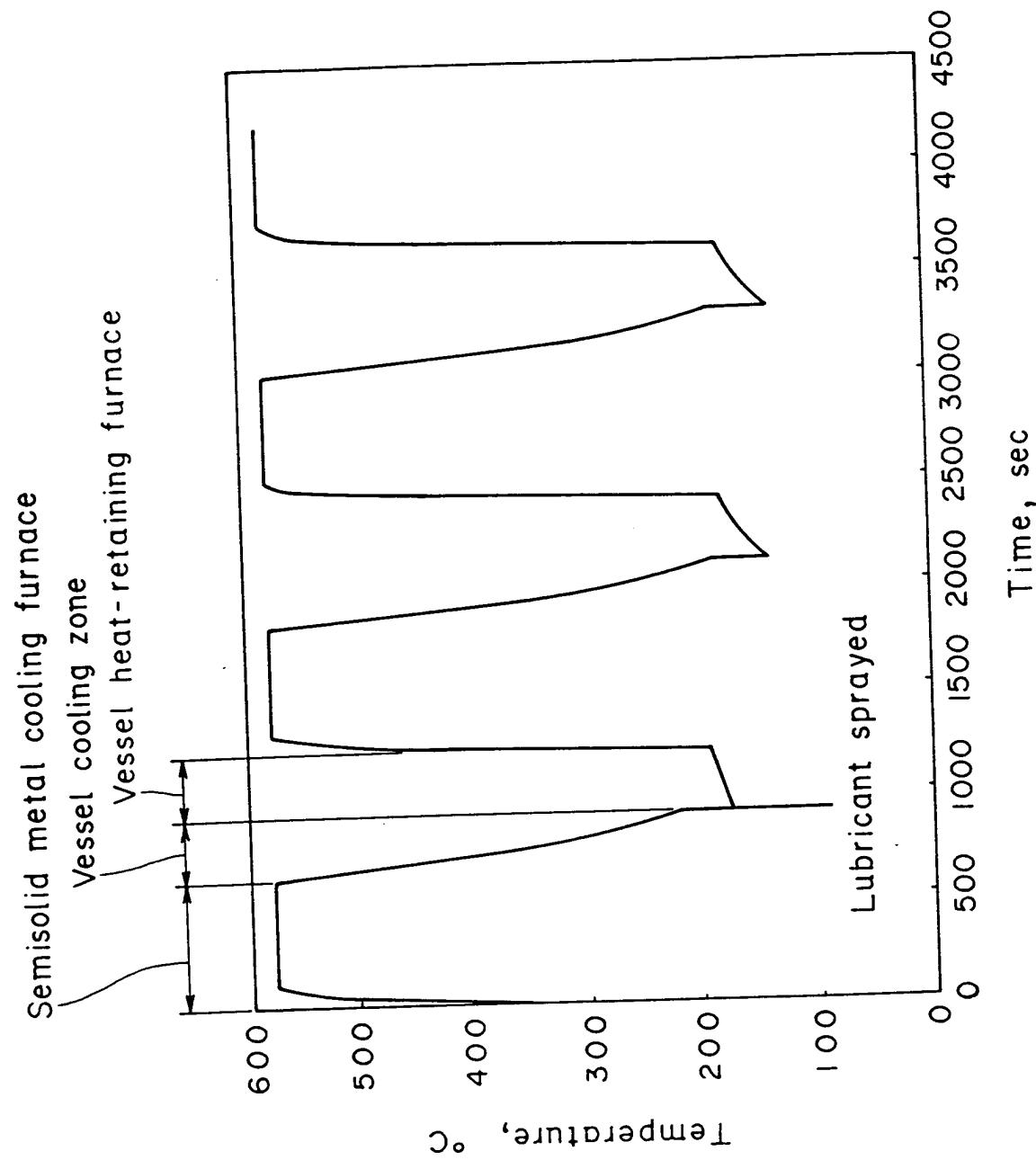


FIG. 53

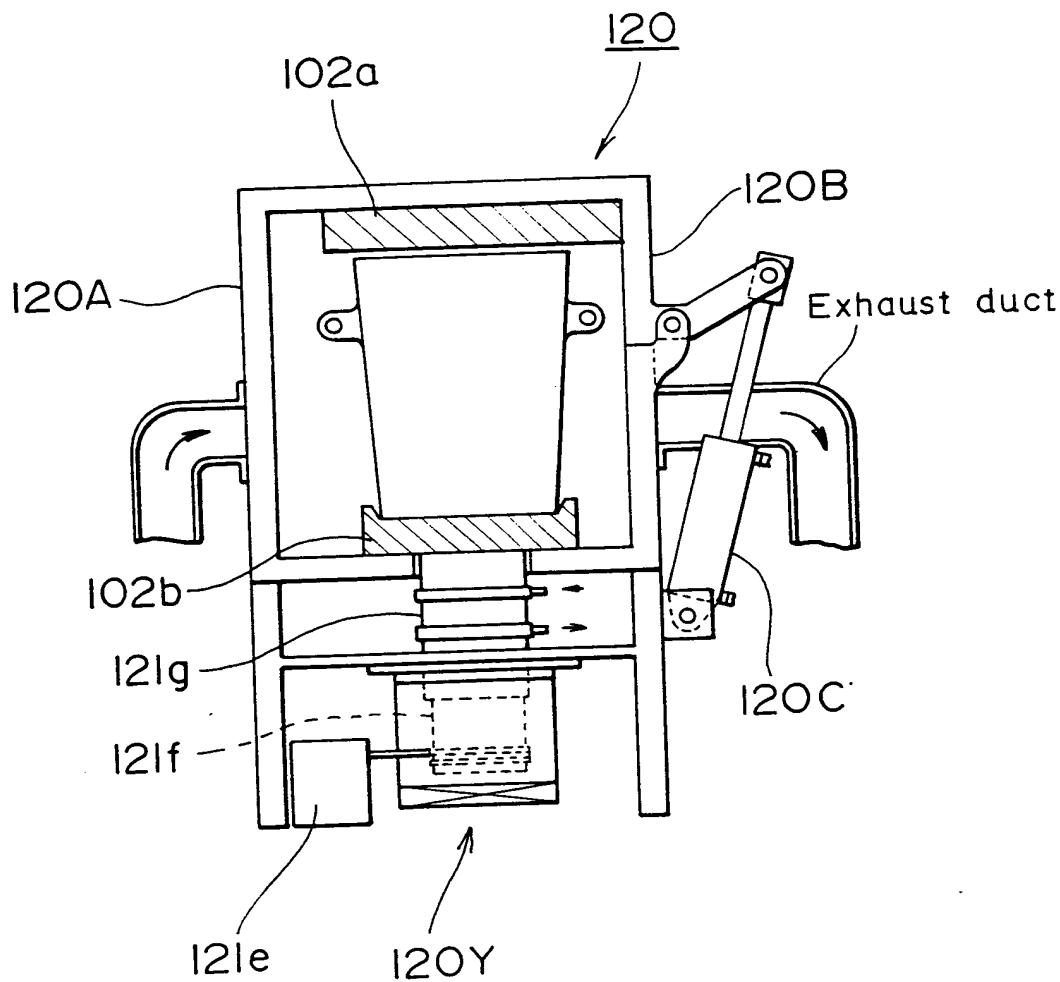


FIG. 54

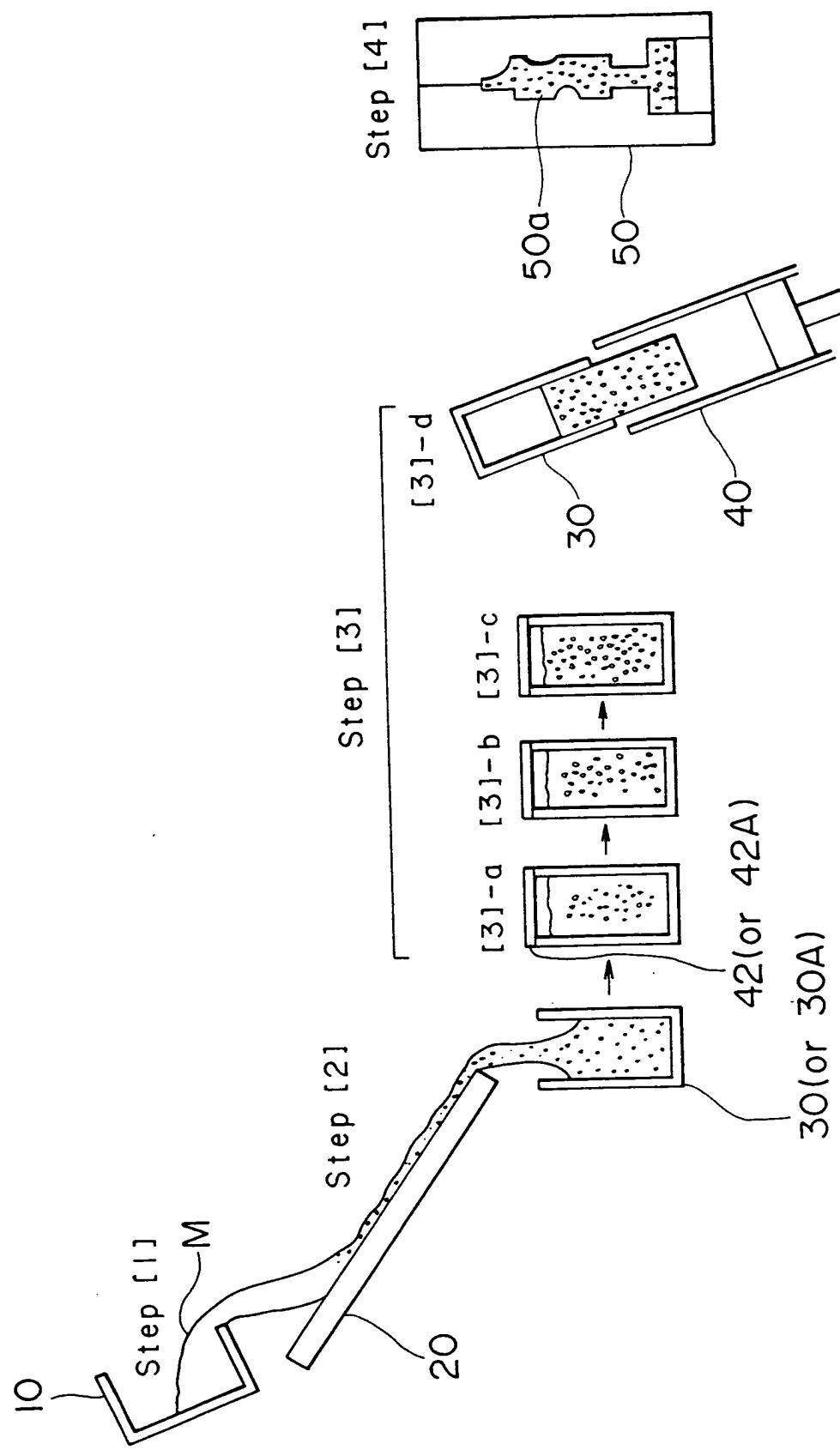
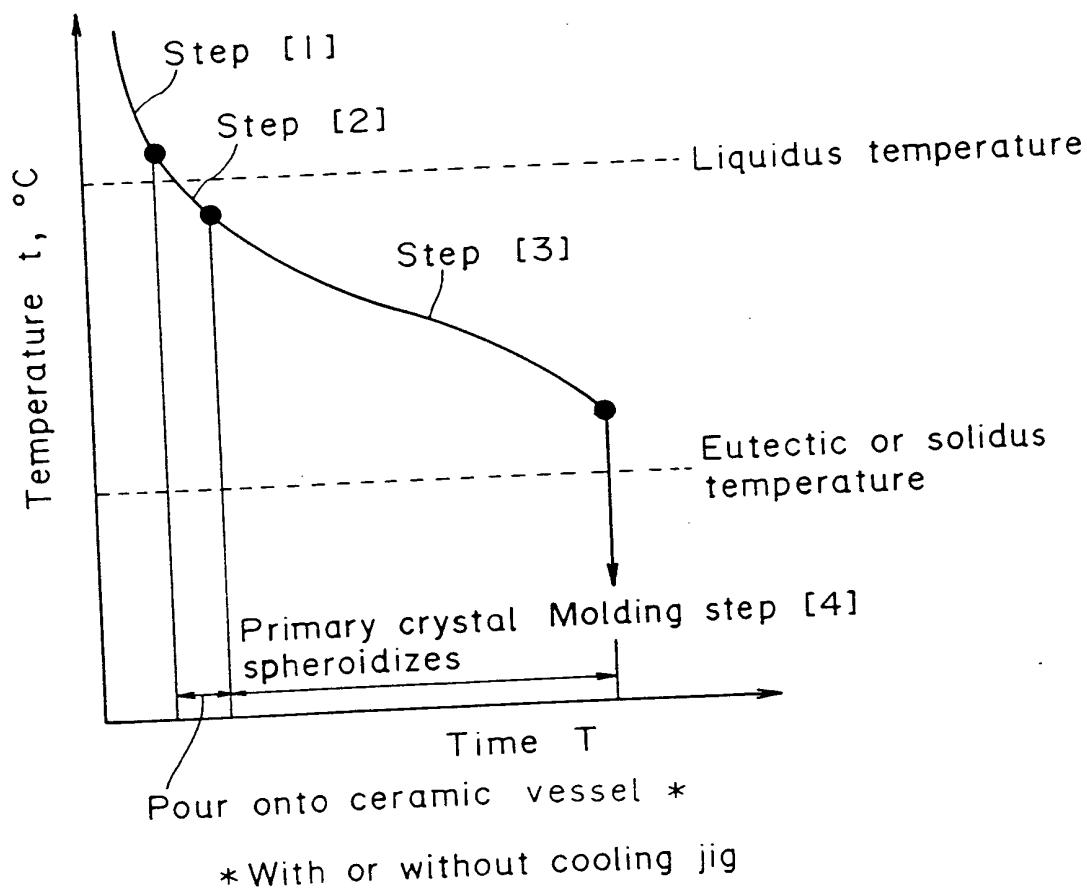


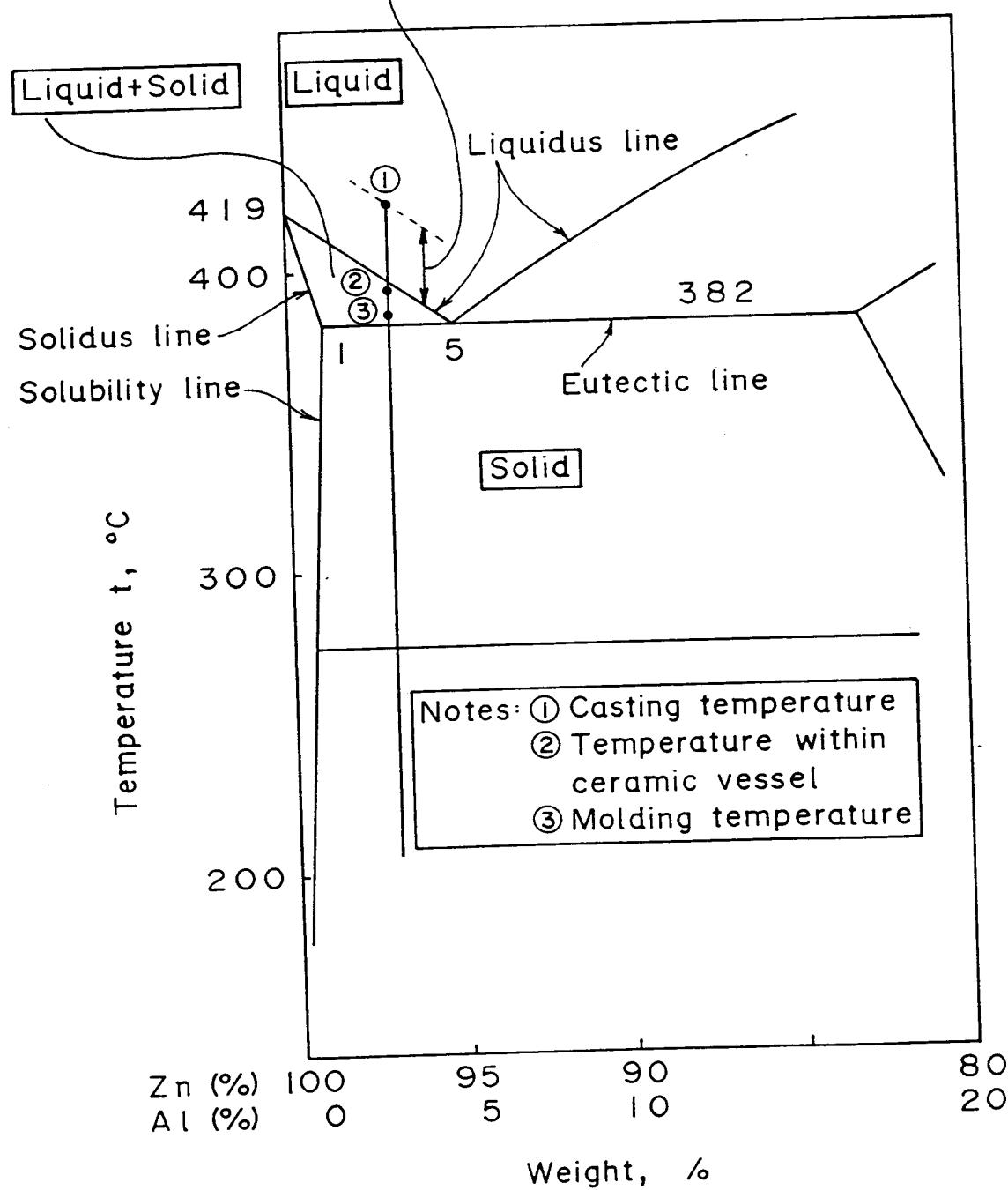
FIG. 55



APPROVED	BY	CLASS	SUBCL.
DRAFTSMAN			

FIG. 56

Superheated to no more than 100°C
 (without cooling jig) or 300°C
 (with cooling jig) above liquidus temperature



APPROVE
BY
CLASS SUBD.
CRAFTSMAN

FIG. 57

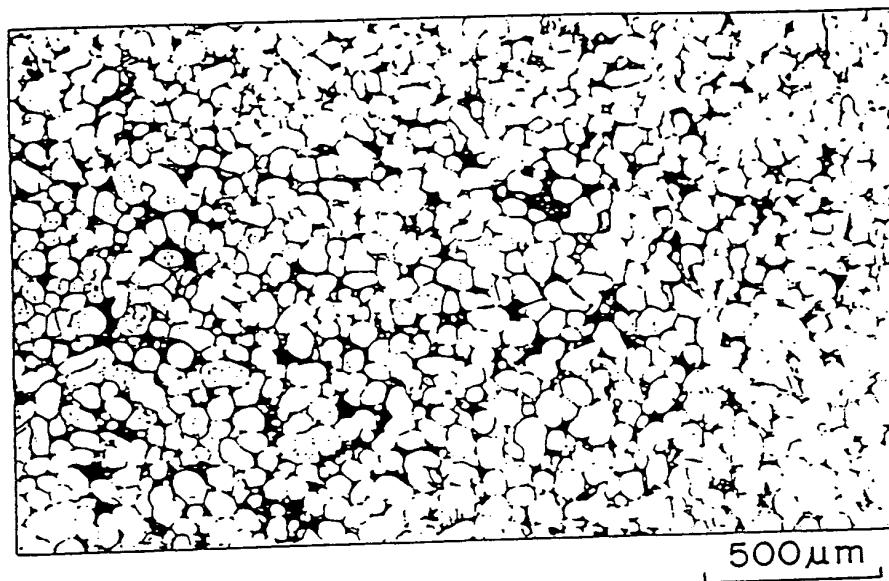


FIG. 58 Prior Art



APPROVED	BY
CLASS	SUBCLASS
DRAFTSMAN	

FIG. 59

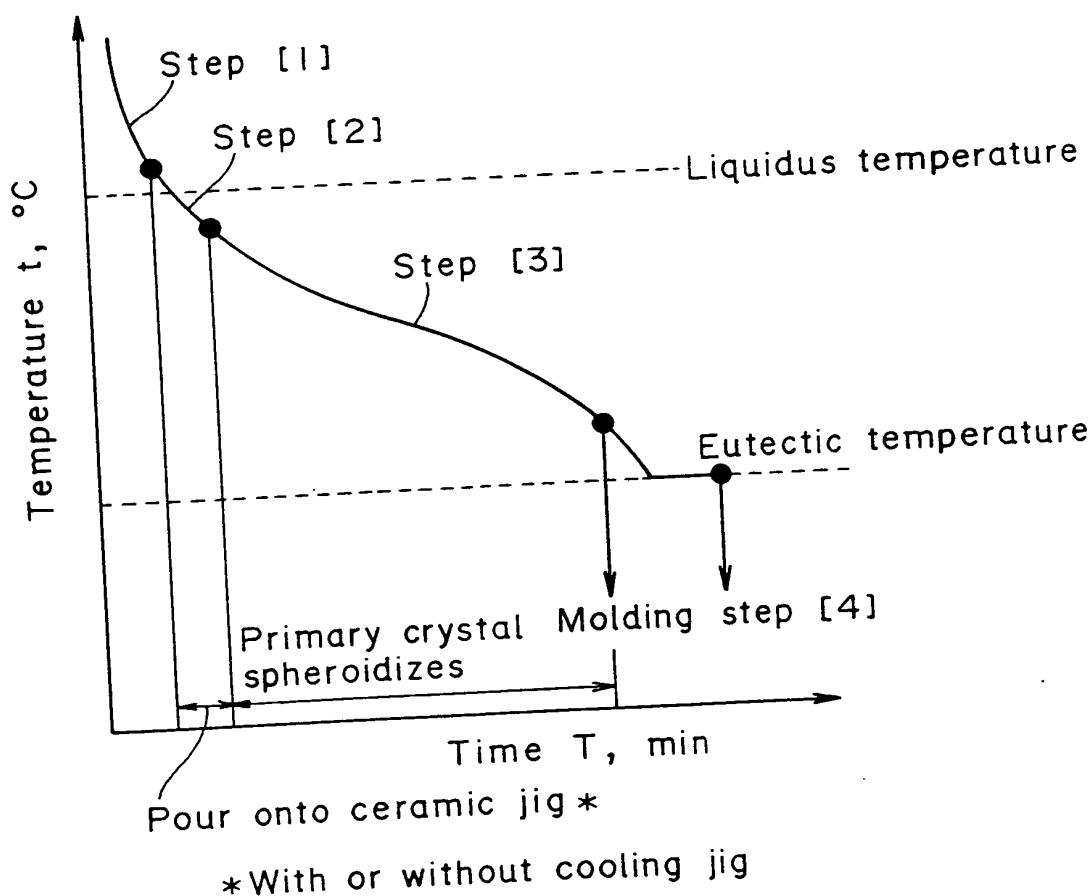


FIG. 60

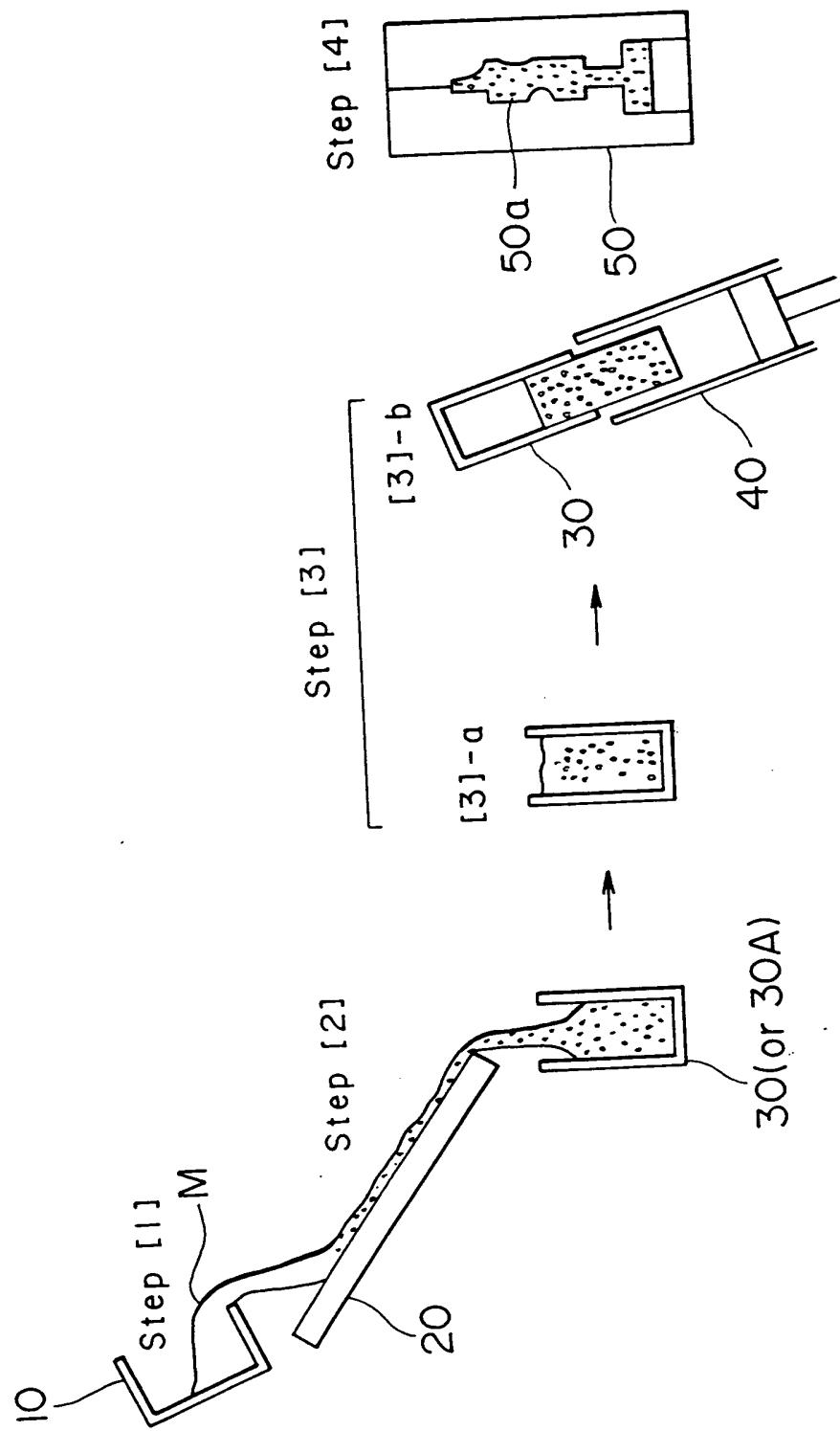


FIG. 61

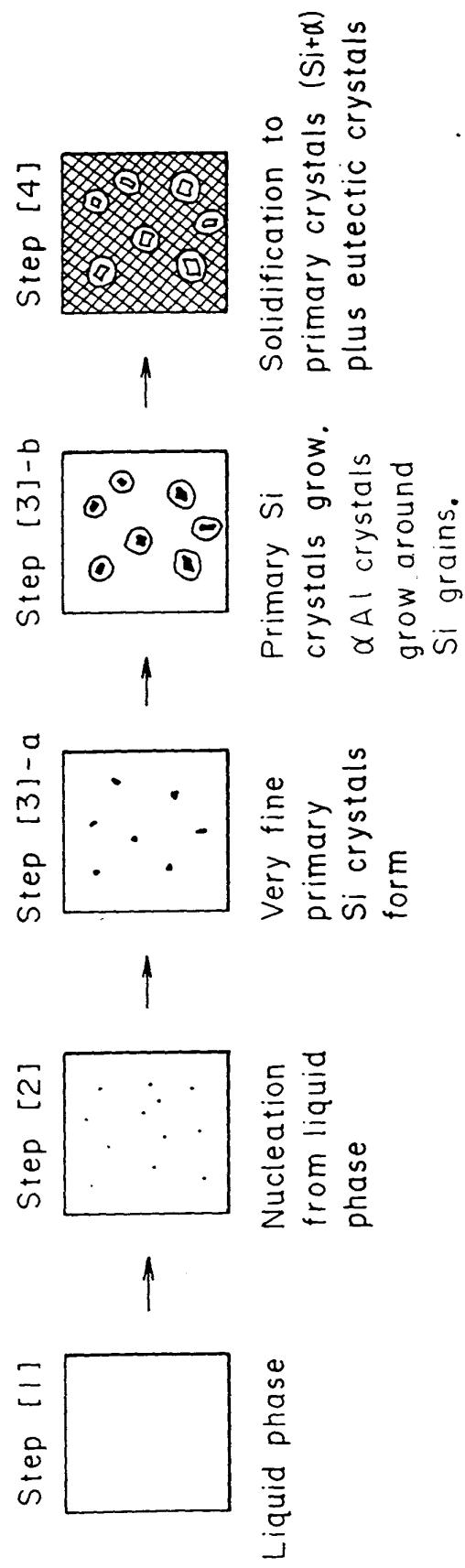
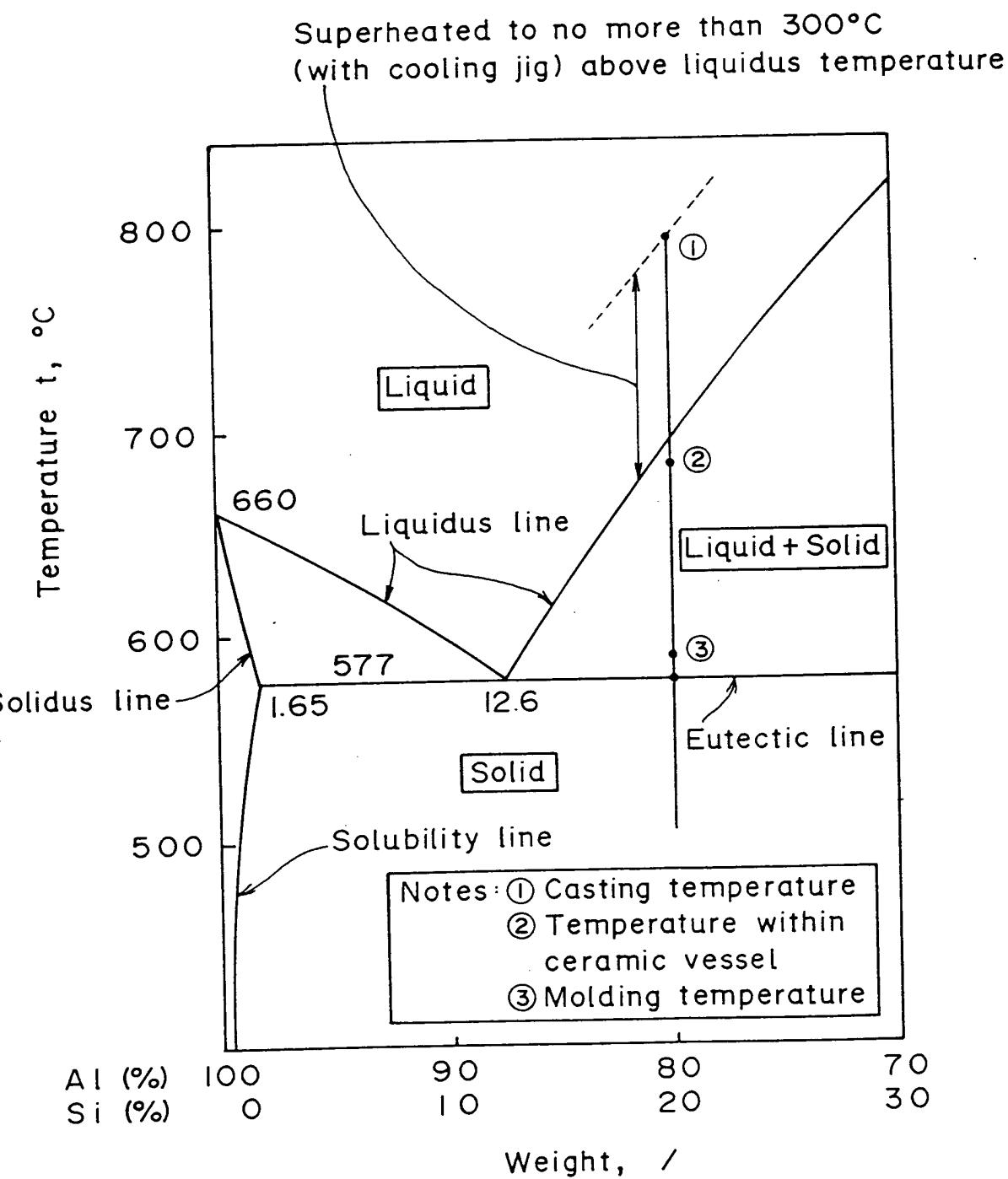


FIG. 62



APPROVED
BY
DRAFTSMAN

CLASS SUBCLAS

FIG. 63

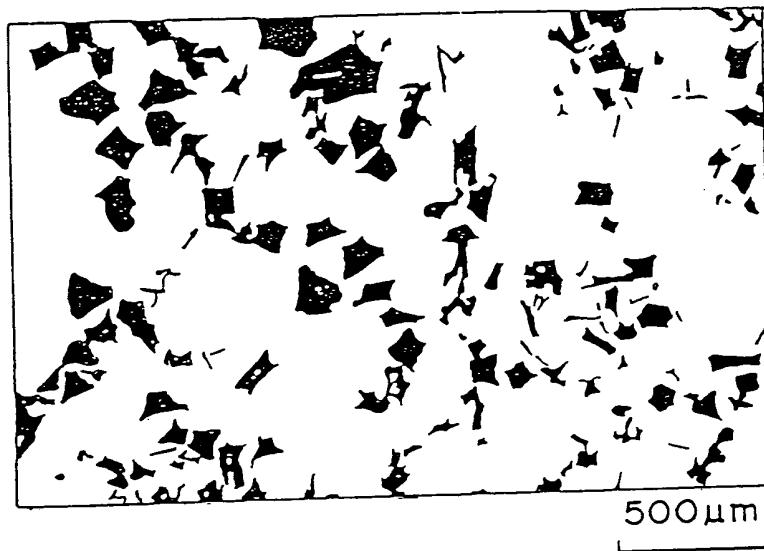


FIG. 64 Prior Art



FIG. 65

Superheated to no more than 100°C
(without cooling jig) or 300°C
(with cooling jig) above liquidus temperature

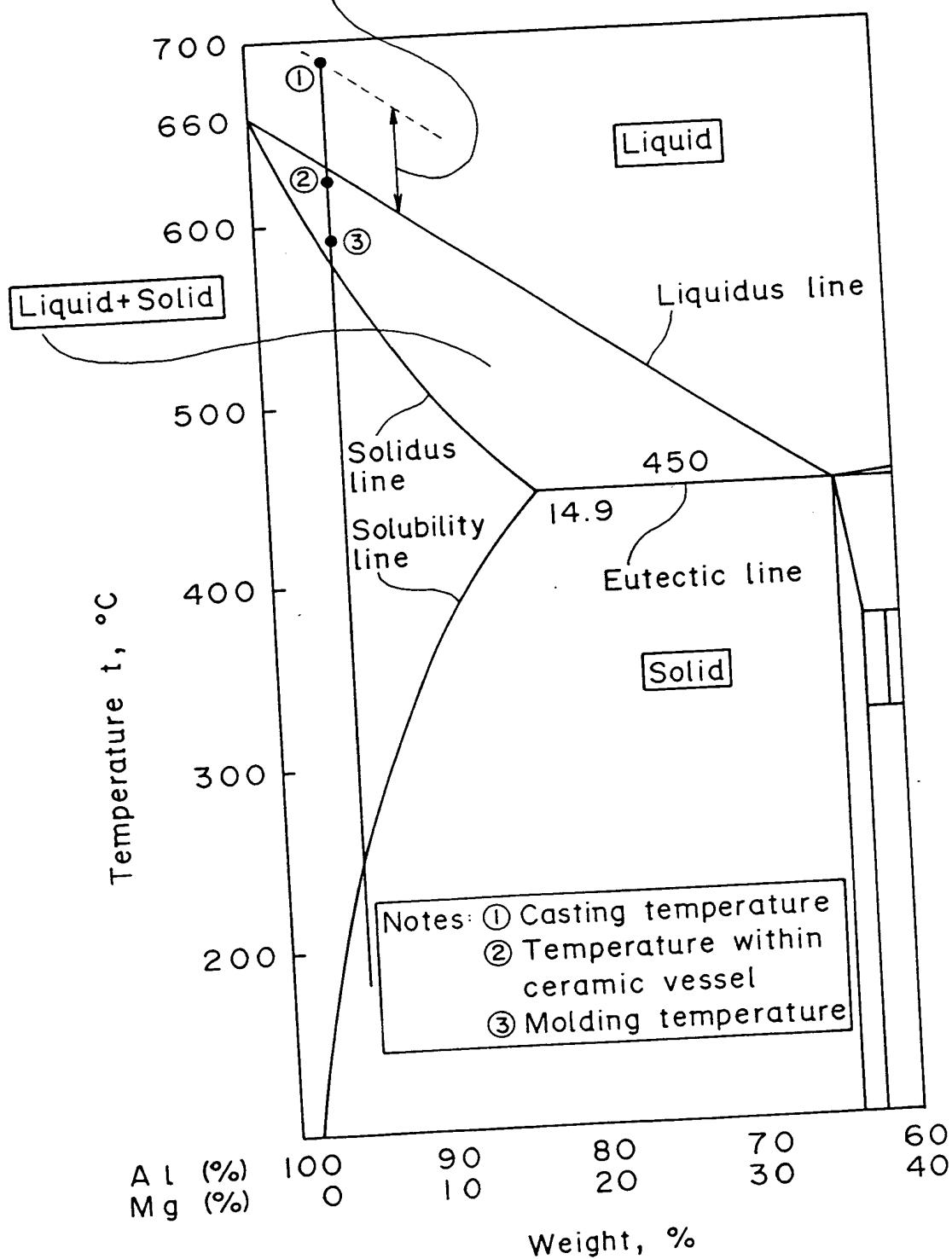


FIG. 66

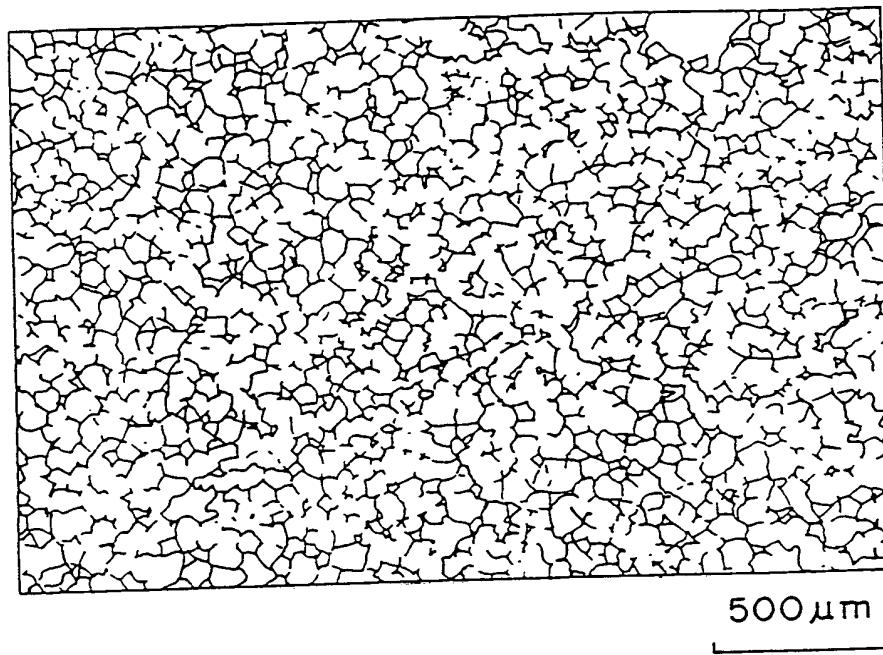
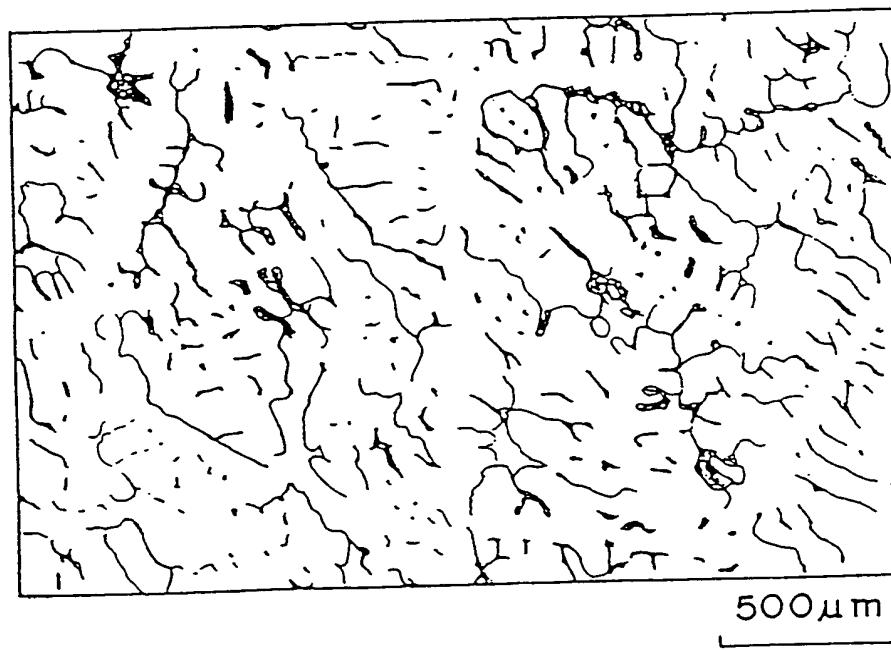


FIG. 67 Prior Art



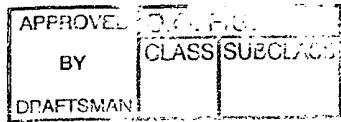


FIG. 68

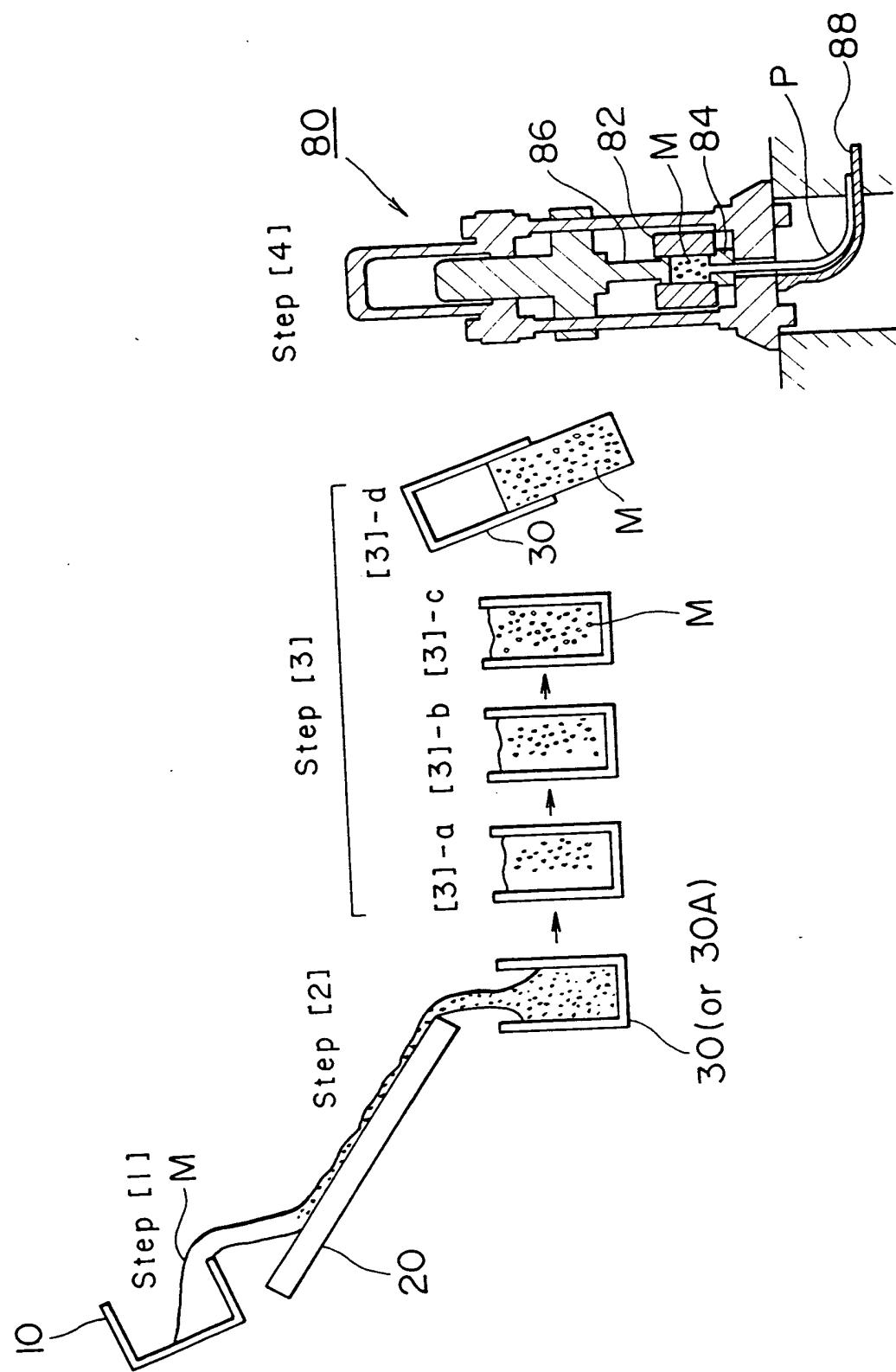


FIG. 69(a)

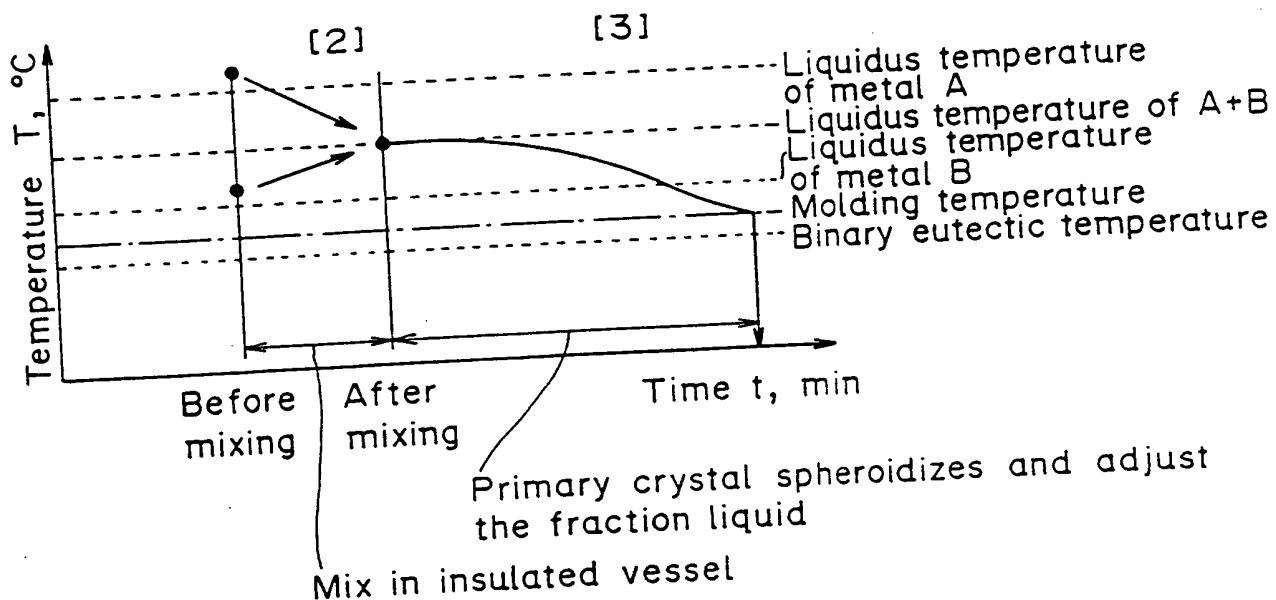


FIG. 69(b)

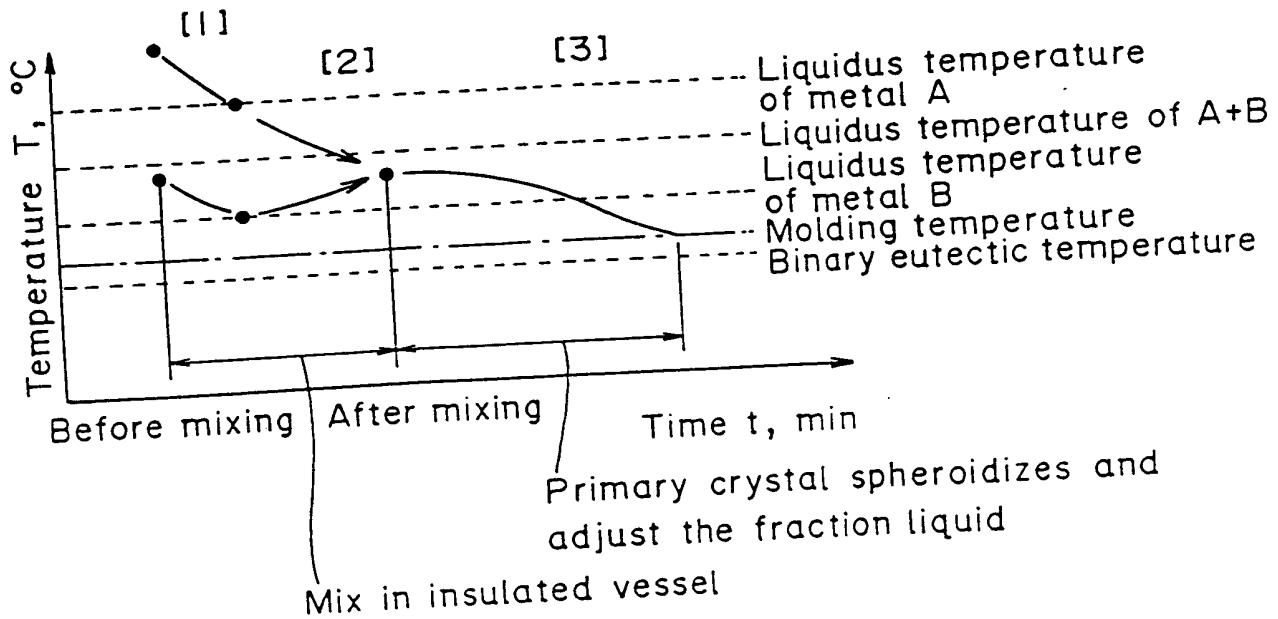
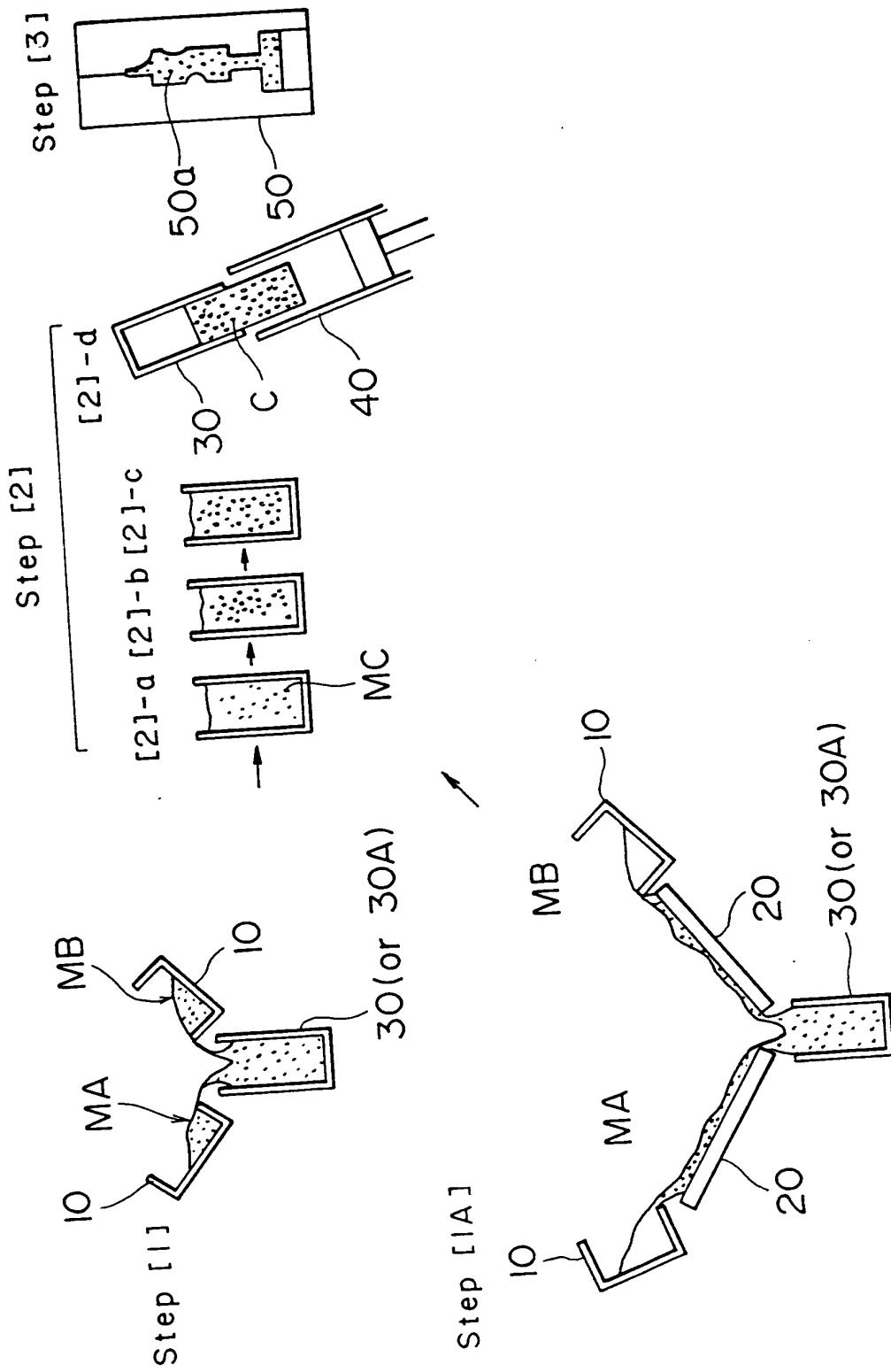
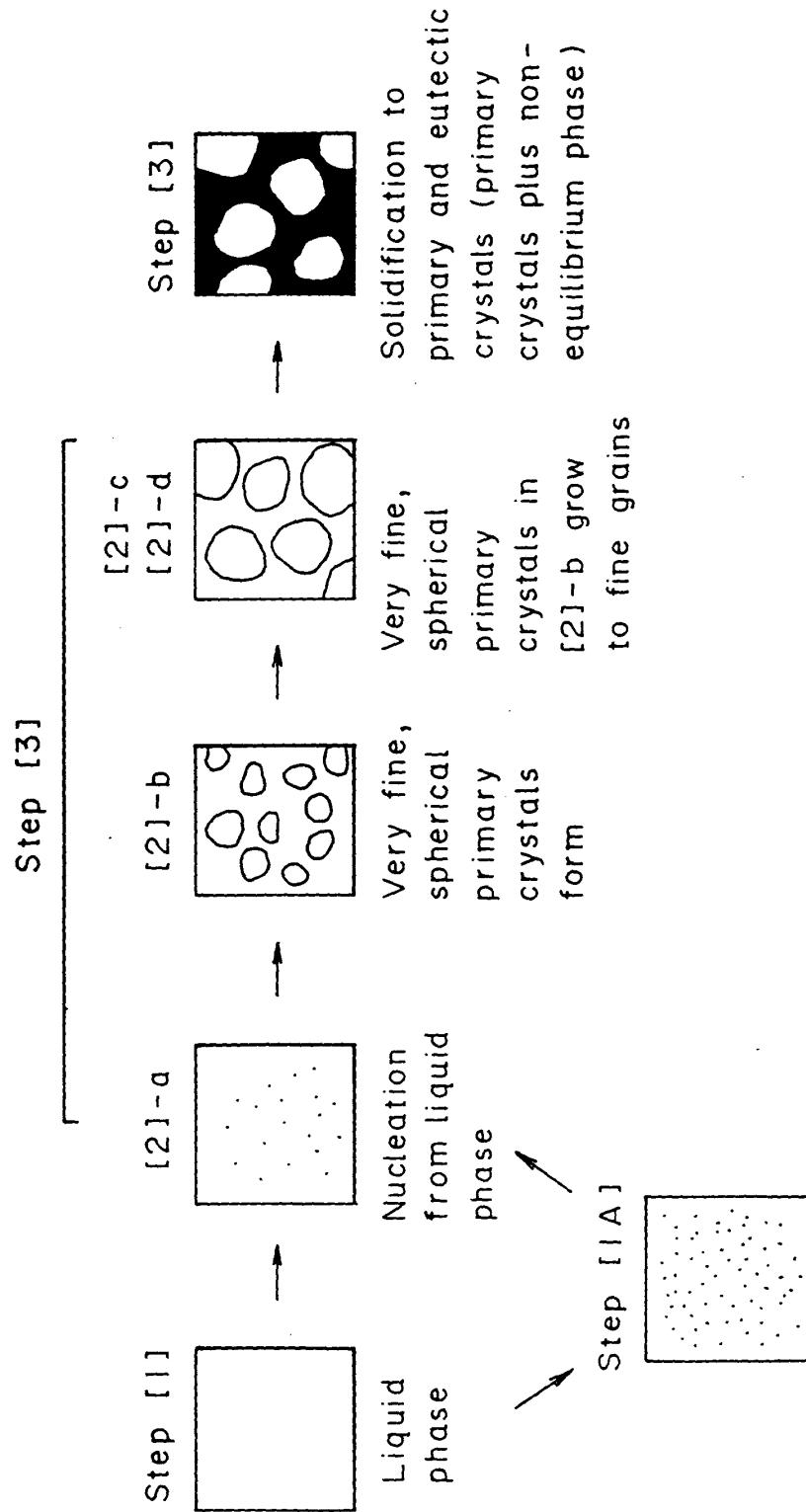


FIG. 70



APPROVED	BY	CLASS SUBJECT
CRAFTSMAN		

FIG. 71



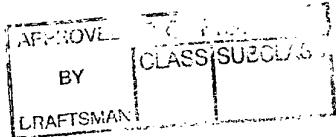


FIG. 72

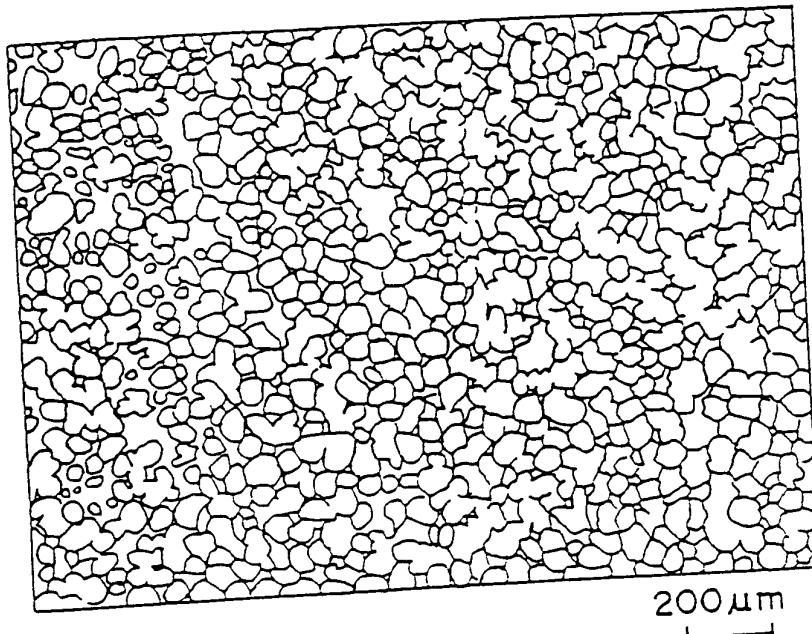


FIG. 73 Prior Art

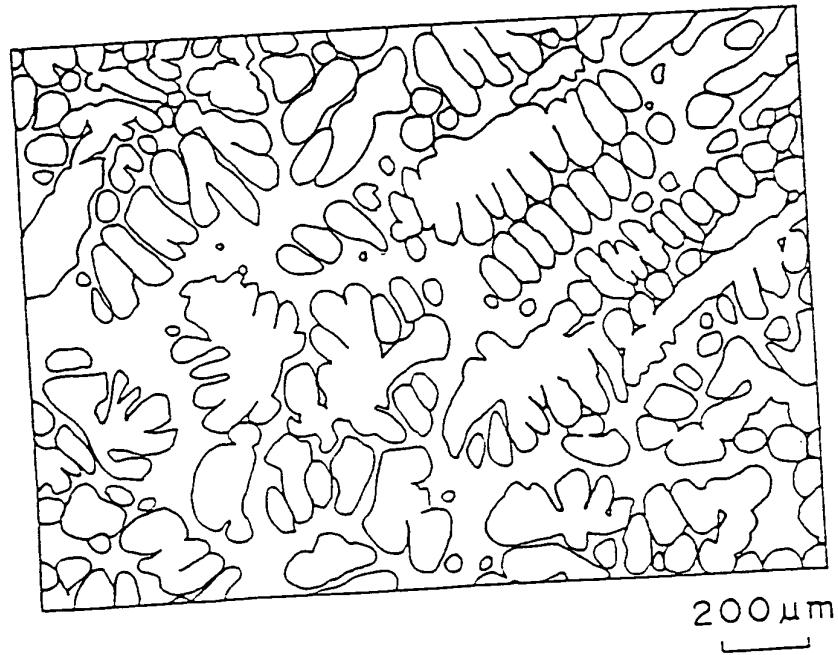


FIG. 74

